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## Appraisal of the Fish for Development project proposal for institutional cooperation between Colombia and Norway

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## About us

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Our employees have high academic credentials and broad experience within consulting. When needed we utilize an extensive network of companies and resource persons nationally and internationally. The company is fully employee-owned.

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# Foreword

The report has been prepared by Gunnar Sander at NIVA and Trond Norheim and Bjørnar Andreas Kvinge from Vista Analyse, supported by a team at NIVA that has contributed with their knowledge on aquaculture and fisheries; Xavier Gutierrez, Paula Andrea Rojas-Tirado and Ingrid Nesheim. Haakon Vennemo has been quality assurer. We want to thank professor emeritus Bjørn Hersoug for comments to the report. Many people have provided valuable insights in our interviews. These are listed in appendix C. We are thankful for all expertise and insights. We thank Olav Rostad and Nina Kristin Snyder at NORAD for the assignment and for useful comments and reflections.

June 28<sup>th</sup>, 2021.

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# Glossary

AUNAP	Colombian Authority for Fisheries and Aquaculture
CAR	Regional development corporations
CCC	Joint Coordination Committee
FfD	Fish for Development
FTS	Flow through systems
GDP	Gross Domestic Product
IAS	Invasive alien species
IMF	International Monetary Fund
IMR	Norwegian Institute of Marine Research
MADR	The Colombian Ministry of Agriculture and Rural Development
MADS	The Colombian Ministry of Environment and Sustainable Development
MFA	The Norwegian Ministry of Foreign Affairs
NICFI	Norwegian International Climate and Forest Initiative
PD	Draft Project Document
RAS	Recirculating aquaculture system
TOC	Theory of Change
ToR	Terms of Reference
WB	World Bank

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# Executive summary

*Vista Analyse and NIVA have made an appraisal of a proposed Fish for Development project in Colombia. The team believes that the project could be an important contribution to poverty reduction in Colombia, but that the plans seem too limited. We recommend changing the output structure and introducing new outputs and activities. In total, where our recommendations call for a larger project than the draft plans and budget. However, we conclude that the project is ready to start after including environmental agencies in both countries to the project group. We recommend starting with an inception phase where some parts of the original project plan can be executed, while other parts of the project undergo a new planning process.*

## Fish for Development

The overarching vision of FfD is to reduce poverty in the collaborating countries by producing food and generating sources of employment. This should be achieved by 1) improving fisheries management; 2) supporting the knowledge base; and 3) stimulating private entities.

Colombia is one of three partner countries in the programme, mainly because of the sectors' potential for strengthening rural areas and thereby contribute to the implementation of the peace accord and rural development ambitions of the Colombian government.

Vista Analyse and NIVA have assessed proposed plans for FfD in Colombia. The proposed project consists of collaboration between experts in Norwegian government agencies and Colombian counterparts, with the goal to support improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors. The review had two main purposes:

1. To strategically inform Norwegian aid providers on key issues surrounding the political economy of fisheries and aquaculture in Colombia and identify key factors that inhibit policy reform in the sector, as well as the factors that influence goal achievement.
2. To appraise the project document (PD) to assess the document's relevance, realism, coherence, potential feasibility, potential risks, safeguards, and the expected sustainability of the project.

The proposed project consists of collaboration between experts in the Norwegian authorities and Colombian counterparts, with the goal to support improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors.

NORAD's ambition is to enter into an agreement with the Colombian and Norwegian parties after having considered the current review, and after the parties having finalized the PD accordingly.

## Context

Colombia's tropical ecosystems have extraordinarily high biodiversity in freshwater as well as in the oceans. Over half of all marine species for which information is available are overfished. Even though there is less information about the status in inland fisheries, overexploitation is a problem also for freshwater species.

Aquaculture in Colombia is completely dominated by freshwater production of the introduced tilapia and trout, but also includes the native species cachama (or pacu). Shrimp is the only species cultivated in the ocean. Colombian export of cultivated fish is limited and has struggled to be competitive. While catches in fisheries have declined, the opposite is the case for aquaculture.

Those working in fisheries and aquaculture are small-scale fishers and producers with lower income and education than average, applying relatively simple technologies. Thus, the target group is highly relevant for FfD. However, the project document contains little information about their situation, needs and responses to the current management system. This needs to be a part of the knowledge base for the project in order to reach FfD's objective for poverty reduction.

Colombia is currently experiencing protests and riots. A long history of internal conflicts is still affecting the country, leaving the country in a fragile situation. Although Colombia is on a trajectory towards increased economic output, large parts of the population is struggling to make ends meet. A project that can support sustainable jobs and food production in parts of Colombia where there are few job alternatives, is welcome. Colombian authorities are promoting increased private investments in fisheries and aquaculture, yet current profitability is poor.

### Main recommendations

The project should ensure participation from fishers, aquaculture producers and communities, aiming to include their knowledge and develop practices of co-management.

Focusing on inland aquaculture, possibly also inland fisheries, would ensure the best scope for reaching the rural poor. However, Norwegian competence on freshwater aquaculture in general and especially in tropical waters is limited. Thus, we recommend including south-south cooperation in the project can be particularly useful for providing Colombia with relevant advice.

The review team recommends that the FAO guidelines are included as a basis for developing policies and management practices that addresses the needs of small-scale fishers and aquaculture producers.

The project should carry out an analysis of the sources and reasons for overfishing as well as destructive fishing practices. Support in finding better technology or practices will be important.

The project should find mechanisms for assembling and sharing data from many stakeholders, and support development of a database that includes both fishing/aquaculture and socioeconomic information.

The proposed project is small in scope and would not be able to give the expected impact. The project should increase its scope and activities along the lines suggested in this report. This leads to that the budget should be increased, but gradually, as new activities are introduced.

The project document reveals little information about environmental impacts of fishery and aquaculture. Introduction of invasive species should be avoided in the framework of the project. Environmental assessments, impact assessments and monitoring requirements should be key issues, and



environmental agencies should be included on both sides (The Norwegian Environment Agency in Norway and the Colombian Ministry of Environment and Sustainable Development).

The project results framework must be finalized and include all relevant baselines and targets. On the other hand, the risk matrix is not clearly related to the design as stated in the results framework. The matrix should focus on a limited number of the main risks for project management, which should be continuously monitored. Project safeguards must meet NORAD standards on "do no harm" and cross-cutting issues.

The project should incorporate a local pilot project to try out in practice the theoretical learning achieved and as a way to measure local impact of any changes AUNAP or ICA would like to make. The pilot will contribute to collaboration between regional and central authorities, as well as universities.

The review team finds that the project addresses important challenges and priorities in Colombian fisheries and aquaculture management. We recommend that it starts up with an inception phase, allowing for necessary changes in project design and budget followed by an adjusted execution phase.

# 1 Background

## 1.1 Cooperation between Norway and Colombia

The Norwegian engagement in Colombian fisheries is shaped by the Norwegian foreign assistance policy from 2017-2018 (MFA 2018). The Solberg government wanted to concentrate Norwegian foreign assistance to a limited number of states and a narrower range of topics. Norway therefore should collaborate more in-depth and long-term with ten partner states. The collaboration should be based on the achievement of the sustainable development goals and poverty reduction, taking the states' national ambitions as well as Norwegian foreign policy priorities into account. The government also wanted to apply a wider set of approaches than the traditional aid by including for instance business collaboration, democracy, human rights and transfer of knowledge through direct government-to-government collaboration. The ambition should be that the partner states in a longer term would manage without aid.

In the white paper, Colombia was selected as one of the ten partner countries. A key background for this was the Norwegian engagement in negotiations aiming to put an end to a more than 50 years' long civil war. A peace accord was signed in 2016 between the Colombian government and the largest of the guerrilla groups, FARC, which had control over parts of the territory. The peace accord contains direct peace related aspects such as cease fire, delivery of arms and justice for the victims, but also initiatives to reduce the root causes of the conflict, such as distribution of land and regional development programmes that can offer alternative opportunities to those who had been engaged in the conflict. Such an approach would also be important in combatting another persistent problem in Colombia, the production of narcotics. Income from sale of drugs have fuelled the armed conflicts. The narco-cartels have a strong presence in certain regions of the country and infiltrate also legal sectors of the economy.

In Norwegian analyses of Colombia, it is highlighted that the country is a medium level income state with a considerable middle class and good competence level, though with large internal disparities. Four strategic goals are formulated for the Norwegian efforts: 1) A final peace, building on implementation of the peace accord with FARC and facilitation of renewed negotiations between the government and the ELN guerrilla; 2) Reduced deforestation as a mechanism for combatting climate change, protecting biodiversity and the land of many indigenous groups; 3) Sustainable business development in areas such as oil and gas, fisheries and sustainable ocean economy; and 4) Increased collaboration with Norwegian companies, including in aquaculture and technology.

In 2020, a total of NOK 523.1 million NOK was used in Colombia. Most of these funds went to governance, civil society and conflict prevention, but the environment and energy sectors were also major beneficiaries.

## 1.2 The Fish for development Programme (FfD) in Colombia

Developing countries increasingly request transfer of knowledge and capacity building. The Norwegian government has established a series of programmes aiming to contribute with Norwegian experiences

and expertise on selected topics. These include oil, fish, taxation, statistics, gender equality, digitalisation, anti-corruption and more.<sup>1</sup>

The Fish for Development (FfD) Programme was launched in 2015. The intention is to utilize Norway's comparative advantages in responding to developing countries' requests for advice and capacity building in sustainable fisheries and aquaculture. The programme is responsible for coordinating all development projects supported by Norway in these areas. The overarching vision of FfD is to reduce poverty in the collaborating countries by producing food and generating sources of employment. This should be achieved by 1) improving fisheries management; 2) supporting the knowledge base; and 3) stimulating private entities.

Even though Colombia was not a typical country for FfD collaboration, the Norwegian government responded positively to a request from Colombia on collaboration and made the country one of three prioritized partners in the programme, together with Ghana and Myanmar. A major reason for this was the potential for strengthening rural areas, thereby contributing to the implementation of the peace accord and rural development ambitions of the Colombian government.

FfD has provided support that has enabled starting a few projects in Colombia, executed by international organisations and Caritas (see section 5.6). The project that is the subject of the current review is planned to focus on institutional collaboration between Norwegian and Colombian government entities and is in a pre-project planning phase. Discussions of its scope and content have been ongoing since 2016. Two fact-finding missions from Norway have travelled to Colombia, and two Colombian delegations have visited Norway. Many issues have been considered in this process. In the draft project document (PD), there are four areas of cooperation and a budget which is lower than for the two other FfD partner countries. Changes of government staff in Colombia following the last elections, and later the COVID-19 pandemic, are major reasons why the process has taken so long. NORAD's ambition is to enter into an agreement with the Colombian and Norwegian parties after having considered the current review, and after the parties having finalized the PD accordingly.

The project's ambition is to contribute to improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors Appendix A includes the proposed outcomes and output of the project.

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<sup>1</sup> For more information, see <https://www.norad.no/en/front/the-knowledge-bank/>

### Text frame 1.1: Project design

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#### **Outcome 1: Relevant governmental management institutions and academia have increased capacity and knowledge in subjects regarding sustainable fisheries management, aquaculture and aquatic animal health**

- Output 1.1: Increased number of staff in governmental management and educational institutions with international postgraduate education and short courses in subjects relevant for fisheries management, aquaculture and aquatic animal health.
- Output 1.2: Increased participation from academia in government decision-making processes regarding fisheries and aquaculture.
- Output 1.3 Increased and strengthened postgraduate offers in fisheries and aquaculture at Colombian universities

#### **Outcome 2: Improved knowledge base for sustainable management of fisheries**

- Output 2.1: Increased knowledge about the state of fisheries re-sources (including previously nonexploited resources).
- Output 2.2: Increased knowledge about fishing gear to improve selectivity and reduce ecosystem impacts.
- Output 2.3: The EAF Implementation monitoring tool is introduced and used for selected marine fisheries in Colombia
- Output 2.4: Increased capacity to interact with international and regional fisheries management bodies.

#### **Outcome 3: Improved capacity for sustainable development of aquaculture**

- Output 3.1: Aquaculture regulations improved.
- Output 3.2: Knowledge base for the development of marine aquaculture established
- Output 3.3: Knowledge about the prerequisites for an improved licensing process in aquaculture established.
- Output 3.4: Improved knowledge of water resource management in aquaculture, with special regard to the effects of all users on general water quality in the waterbodies.

#### **Outcome 4: Improved health management of farmed aquatic animals in Colombia**

- Output 4.1: Improved competence and capacity of ICA laboratory in the diagnosis of diseases.
  - Output 4.2: Increased technical knowledge of ICA professionals in matters related to health, epidemiology, and diagnosis.
-

## 2 Mandate and methodology

### 2.1 Purpose and scope

The present review has two main purposes:

1. To strategically inform Norwegian aid providers on key issues surrounding the political economy of fisheries and aquaculture in Colombia and identify key factors that inhibit policy re-form in the sector, as well as the factors that influence goal achievement. This analysis will identify risks associated with the proposed cooperation areas and the prospect of achieving results.
2. To appraise the project document (PD) to assess the document's relevance, realism, coherence, potential feasibility, potential risks, safeguards, and the expected sustainability of the project. The appraisal of the PD should consider findings in the political economic analysis and provide recommendations.

The scope of the review is specified in the Terms of Reference (ToR) (Appendix A). The structure of the report follows the ToR.

### 2.2 Methodology

NORAD's first request for this review was to conduct a desktop study, primarily based on documents provided. The review team received approx. 30 documents and reports about the project, and fisheries and aquaculture in Colombia, which have been consulted extensively. We have supplemented with searches on sources on the Internet and documents received from interviewees. The most important ones used in our work are listed in appendix B.

During the discussions about the ToR, the team proposed to conduct a limited number of interviews. The intention was to get a better understanding of the project design phase and independent perspectives on the fishery and aquaculture sector in Colombia. The interviews were undertaken electronically (Teams). There were two or three participants from the review team on all interviews. The conversations with the Colombian interviewees were in Spanish or English, depending on the language skills of the participants. The team took notes, but a couple of the interviews were also recorded for later consultation, with the consent of the interviewees. These will be deleted as soon as the review is finished.

There are clear limitations on how deeply and extensively we have been able to answer several questions from NORAD, given the number of working days. Particularly the limited political – economic analysis would have required more extensive interviews and searches in scientific literature. We therefore tried to answer them to the extent relevant for the primary task, the appraisal of the project. Many of these issues need to be researched better after the start of the project.

## 3 Political and economic context

The political economy of fisheries and aquaculture in Colombia has not been the topic of a separate Norwegian analysis before. Elements of it have been addressed in the reports from international organizations such as OECD (2016), the PD and the reports from the Norwegian fact-finding missions. A report from KPMG also analysed several contextual issues as a background for recommendations on how to collaborate to stimulate the private sector under FfD in Colombia (KPMG 2018). Our report does only address selected issues according to the ToR.

### 3.1 Fisheries and aquaculture in Colombia

In Norway, the coast, and the oceans host most of the commercially important activities related to fish. In aquaculture, production of fingerlings (smolt) on land prior to introduction of the fish in cages in the fiords is an important exception. A relatively new direction of development is the establishment of production sites for salmon on land to reduce the environmental impacts and avoid the management limitations on the activity in the fiords. As regards inland fisheries, recreational fishing dominates; only certain lakes are fished more intensively.

In Colombia, this is different. Both aquaculture and fisheries are significant in the more than 20 million hectares of aquatic ecosystems in the interior of the country as well as along the 3,000 km long coastline and out in the exclusive economic zone (EEZ). Thus, it is necessary to keep in mind that there are four sub-sectors that are relevant in Colombia: Both fisheries and aquaculture occur in freshwater as well as in marine waters (conceptually, a 2 x 2 matrix). For FfD it should be important to have good information on all of these as a basis for prioritisation and direction of efforts. This applies also to inland fisheries, even though it according to the PD is not a part of the FfD project. However, inland fisheries need to be included somehow, at least because these fisheries may be affected by aquaculture.

#### 3.1.1 Key characteristics

Unreliable statistics and missing data in Colombia are key challenges for getting an overview of i.a. the resources, volumes harvested and farmed, value creation, employment, and contribution to food security, livelihoods, and the national economy (OECD 2016: 10). Major reasons for this are the informal nature of the activities, the dispersion of fishers and producers throughout the country, and limited government capacity to cover extensive areas, some of which are still associated with security risks and low government control. Based on descriptions in the PD and in several other documents that the review team has accessed (OECD 2016, KPMG 2018, MADR 2021), we will highlight some key characteristics of fisheries and aquaculture in Colombia, with updated statistics where available:

- **The wild-living fishery resources:** Colombia's tropical ecosystems have extraordinarily high biodiversity in freshwater as well as in the oceans. One implication is that there is a low abundance of each fish species, as opposed to conditions in the Norwegian cold waters with fewer species occurring in larger stocks. Thus, there is a high mix of species in many fisheries, making by-catch an important issue. Over half of all marine species for which information is available are overfished (PD: 9). There are some species that are under-utilized and that may be sources for new

harvesting. However, IMR has assessed that the shallow Colombian continental shelf provides limited possibilities for rich fisheries.

For inland fisheries, there is little information about the status of the 173 stocks that are reported to be fished (OECD 2016:13). However, overexploitation is a problem even for freshwater species. In the major Magdalena and Cauca river basins, catches have dropped significantly, and a seasonal fishing ban has been introduced (PD: 9). Fishing for ornamental species meant for aquariums is a peculiar sub-sector that runs the risk of overexploitation of rare and endangered species.

- **Production volumes:** The two sub-sectors demonstrate opposing trends: Total catches from fisheries has decreased by almost 50% from the 1990s (PD:9), dropping from 148,000 tons of fish, crustaceans, and molluscs in the peak year 1997 to 69,000 tons in 2018 (see details in Appendix D). Aquaculture production, on the other hand, has increased steadily since the turn of the century and reached a production of 179,000 tons in 2020. There are expectations for continuous growth in freshwater aquaculture; opportunities for marine aquaculture are more uncertain due to i.a. lack of regulation and diseases in shrimp mariculture (PD: 11).
- **GDP:** In terms of registered value creation, aquaculture and fisheries play a minor role in the country's economy, providing approx. 0.25% of the GDP (MADR, 2021). The most valuable sub-sectors are those targeting products for export, such as tuna fishery and cultivation of shrimps, tilapia and trout (OECD, 2016:10).
- **Trade:** Fish has increasingly become a Colombian export product. At the same time, Colombia imports more fish than it exports: 70% of the fish consumed inland is imported (OECD 2016: 12, PD: 8). In a comment to this report, AUNAP referred to a more recent estimate at 40%. One reason for the trade deficit is the free trade agreements that stimulate import of fish. This puts a pressure on the prices of national producers that must compete with i.a. cheap pangasius from Asia. Colombia account for 5% of international trade in ornamental fish.
- **Employment:** Fish is more important for employment than in economic figures. Most fishers as well as aquaculture producers operate informally, without registration or licences, making exact calculations difficult. Other complicating factors are the seasonality of the activities and the many part-time employed, making a definition of a "fisher" difficult. OECD (2016:10-11) estimated that there were between 67,000 and 150,000 artisanal fishers and 10,000-15,000 jobs related to industrial fisheries. Similarly, the estimate for jobs related to the aquaculture sector was approximately 120,000. However, when taking indirect jobs from associated activities into account, the total employment from fisheries and aquaculture was 1.5 million according to a 2012 census. That was slightly above 5% of the national employment at that time.
- **Socioeconomic status:** Fisheries and aquaculture are means of livelihood for the poor in Colombia. A large percentage of the activities takes place in some of the poorer regions of the country, which also are the homelands of indigenous communities and where people displaced from the internal conflicts are found. Moreover, a national household census from 2012 found that 3/4 of those employed in fisheries and aquaculture production earned less than the minimum salary rate (which is USD 245/month in 2021). Half of them had only a basic primary education level and almost one-fifth were illiterate (OECD 2016: 11).
- **Nutrition:** The average annual consumption of fish in Colombia is only 8.8 kg, however, rising (MADR 2021). OECD warned that these averages hide strong regional and household-level variations. Fish is relatively expensive compared to chicken, beef, and pork, and therefore not a priority for people with low and middle income that must buy their food. At the same time, fish is the

cheapest and most easily accessible source of protein and vital nutrients for poor people living close to rivers, lakes, lagoons and along the coast. For them, fish provides an important supplement to a diet often dominated by carbohydrates.

- **Marine – freshwater:** Aquaculture in Colombia is completely dominated by freshwater production of the introduced tilapia and rainbow trout, and the native species cachama (or pacu). Shrimp is the only species cultivated in the ocean but dropped to a record low production in 2018 (see details in Appendix D).

In fisheries, FAO data from 2018 indicate that the oceans contributed with the major share of the catches, 48,000 tons vs. 22,000 tons from freshwater. For employment, it is the opposite: approx. 2/3 of the fishers operate in inland waters and 1/3 along the coasts (OECD 2016: 10).

**The management system:** Responsibility is shared between agricultural and environmental authorities (PD; OECD 2016). The Ministry of Agriculture and Rural Development (MADR) and the Ministry of Environment and Sustainable Development (MADS) cooperate to develop laws and regulations related to hydro-biological and fishery resources. MADR is responsible for drafting policies, plans and programmes for sustainable development of the agricultural, fishing, and rural sectors. In this regard, and according to the “National Development Plan” (NDP) which is issued every four years, the MADR proposes programs and projects concerning promotion and research of fisheries and aquaculture to be carried out by the Ministry itself or by its sub-ordinate agencies. MADR also prepares and presents draft legislation related to the agriculture and fisheries sectors to the Colombian Congress.

The main implementing agency for MADR in the sector is the National Authority for Aquaculture and Fisheries (AUNAP). The Colombian Agricultural Institute (ICA) provides Veterinary Services for aquatic animals. These are the two major institutional beneficiaries of the project in Colombia.

Decisions regarding management of the fish stocks are undertaken within the framework of the Executive Committee for Fisheries (CEP), an inter-agency law enforcement entity which brings together representatives of i.a. the MADR, MADS and AUNAP. MADS in collaboration with regional authorities are responsible for issuing environmental licences to aquaculture producers (see section 3.5).

### 3.1.2 Supplementary information and data sources

There are many needs for knowledge in the project, qualitative as well as quantitative. IMR (2018) emphasizes the need for better statistics on catch, the fish stocks and the ecosystems. OECD (2016) highlights the need for better socio-economic information. The PD adds needs for better knowledge on i.a. fishing gear, environmental conditions, prerequisites for marine aquaculture regulations and improved licencing processes, and epidemiological information. Certain of these needs for better knowledge will be addressed in the project, while other topics should be added (section 5.2).

The need for better information and updated statistics has been a topic in several interviews. We have received references to web sites, most of which is in Spanish. There is much information available, however it is not easily accessible for all the needs of the project. Our general impression is that data seem to be fragmented, hard to aggregate and reconcile across different sources such as local administrations, has insecure quality, and variable geographical and temporal resolution<sup>2</sup>. In the project, searches

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<sup>2</sup> Aunap has in the finalization phase of this report provided us with additional data and statistics. This information is shared with NORAD.



for supplementary information will be needed, for instance from universities, research institutions, NGOs and traditional data holders. We have tried to go into detail on two types of information, the production volumes in aquaculture and in fisheries. This illustrates some of the problems of finding reliable and updated statistics, i.a. contradicting numbers from different sources. AUNAP also has provided more detailed statistics on trade in fish and shellfish products (Appendix D).

## 3.2 Political and economic context

The current president Ivan Duque from Central democratic party was elected in 2018. The next election will be in May 2022 with change of government in August 2022. A new president leads to more extensive changes in governmental positions than in Norway, where only the minister and a few advisors change after an election.

There have been riots and protests in Colombia in 2021. The protests started as a response towards the proposed tax reform. The tax reform has been heavily criticized for hurting the poor and the middle class. Regressive taxes will hurt the poor instead of preventing inequality that is prominent in Colombia<sup>3</sup>. The protesters accuse the government of being insensitive to the people's situation in the economic crisis caused by the COVID pandemic and for not implementing the peace accord. Increased tension in Colombia is considered by international investors as an increased risk and hurt optimism in forecasts of future opportunities. Thus, long-term peace building and stability will be important for increasing foreign investments in all industries, including aquaculture and fisheries. On the World bank's index for "political stability and absence of Violence", Colombia ranks below the 20th percentile. Colombia is still in the recovery phase after years of internal conflicts. The implementation of the peace accord from 2016 is key in this respect. Colombia still faces challenges in consolidating peace and guaranteeing political rights and civil liberties throughout its territory. The political situation and the country's economic development are fragile. The current administration is reluctant to implementing the existing peace accord and has stated that it wants to revise parts of it<sup>4</sup>. There are free elections and public institutions seem to be functioning. Local and regional elections are generally characterized by greater opacity and more frequent violence than national elections. Crime rate and homicide rate fell after 2012 and has now levelled out at a level close to some other neighbouring countries. Colombia needs support in building peace and stability.

Sustainable job creation is vital in creating peace. In this respect, sustainable jobs in rural areas can be significant. FfD is therefore relevant in the political-economic context (see section 5.1 on the current project's possible contribution).

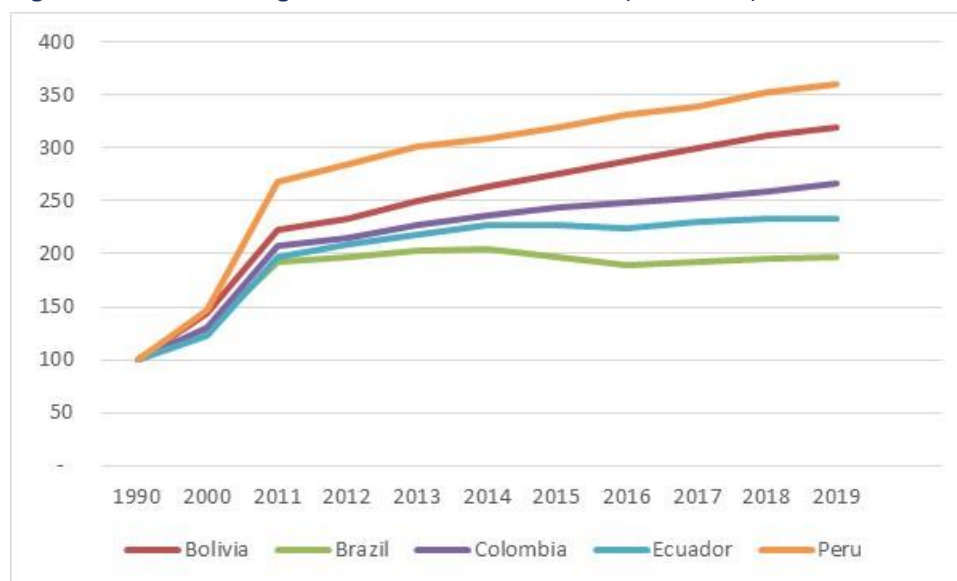
Colombia classifies as an emerging Upper-middle income economy. Gross domestic product has increased more in Colombia than some of its neighbouring countries. The figure shows GDP in Colombia and neighbouring countries with GDP indexed and 1990-level set to 100. The figure shows that Peru followed by Bolivia has the highest growth in the period. Colombian growth seems to be placing itself in the middle<sup>5</sup>.

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<sup>3</sup> World bank's estimate for Income Gini index for 2019 is 51,3. This figure ranks between 0 - perfectly egalitarian and 100. Colombia's index is well above USA, Europe and higher than most other countries in the region.

<sup>4</sup> Le Monde Diplomatique <https://www.lmd.no/2021/06/den-indre-fiende-gjor-oppror-i-colombia/>

<sup>5</sup> World bank database. GDP at constant USD. Recent data for Venezuela is missing

**Figure 3.1: GDP growth in selected countries (1990=100)**

Source: World Bank, Vista Analyse

Growth in GDP per capita has been modest in the last decade. Again, Colombia seems to be in the middle compared to neighbouring countries. Although GDP per capita ranks Colombia as an upper middle-income economy, wealth is distributed unevenly. Colombia continues to suffer from one of the highest inequality rates in the west. Thus, one should aim at activities that support people on the lower end of the income distribution. Fisheries has a small part of the GDP, but it provides jobs, incomes, and food in rural areas where economic opportunities are scarce. Some of these regions are home to indigenous communities and people displaced by the internal domestic conflicts. A poll by Gallup from 2019<sup>6</sup> showed that about half of the respondents in Colombia stated that they had experienced lacking money for food the last year. The situation was worse for women than for men.

The FfD project's ambition for poverty reduction will certainly be relevant for artisanal fishers and rural population. For a project aiming primarily at capacity building in public institutions, it is a challenge that these fishers' activities often are not registered and formalised. Registration and good statistics are relevant for resource management and for providing technical or financial support.

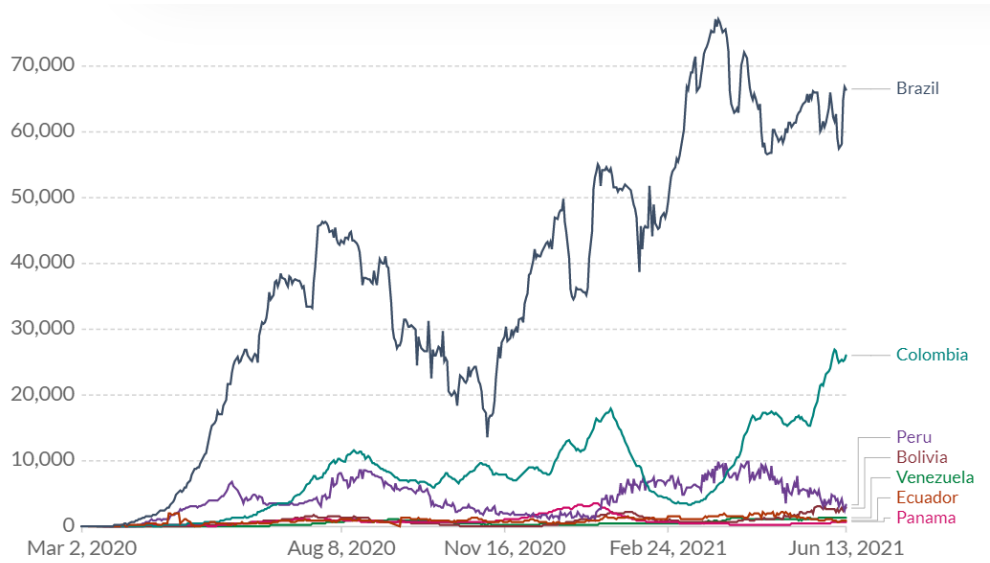
COVID-19 has affected Colombia and led to a steep temporary decrease in GDP in the second quarter of 2020. Since then, macro-economic figures have improved. Vaccination status shows that currently about 10 million vaccine doses have been distributed in Colombia, as of May 2021. Colombia's number of covid-cases has surged recently, the large number of people protesting being one likely cause. The riots harm vaccination efficiency and health care negatively. The number of new cases per day in late May and early June are the highest in the country since the pandemic started<sup>7</sup> (Figure 2). While some of the neighbouring countries are on a trend with reduced numbers of new cases, Colombia is now one

<sup>6</sup> <https://news.gallup.com/poll/272324/colombians-wider-divide-rich-poor.aspx>

<sup>7</sup> <https://ourworldindata.org/coronavirus/country/colombia?country=COL~BRA~ECU~PER~VEN~PAN~BOL>

of the countries in the world with highest number of new cases. In Bogota, there are only few available ICU beds in hospitals<sup>8</sup>.

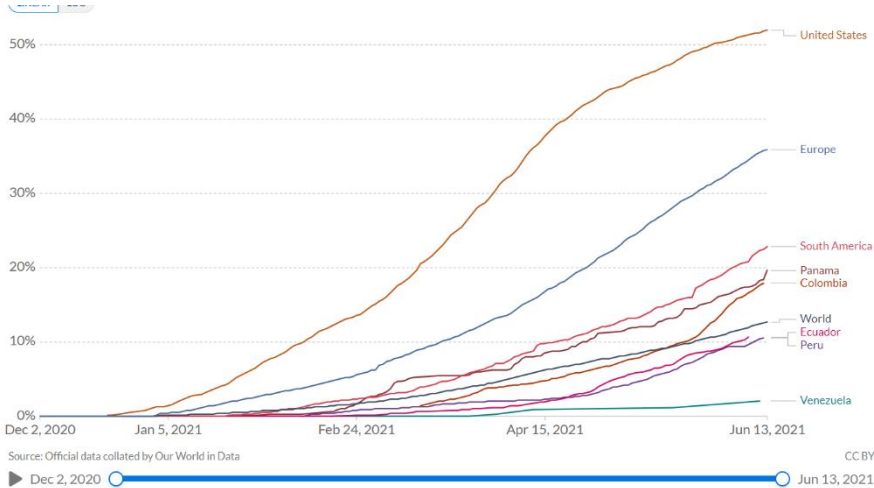
Figure 3.2: Number of new daily confirmed Covid cases



Source: Johns Hopkins University, Our World in Data

Figure 3.3 indicates that the vaccination rate in Colombia is better than most neighbouring countries and way above world average, but below average vaccination shares in South America. The trend is very positive, with number of vaccinations increasing significantly in May and June 2021.

Figure 3.3: Share of population that has received at least one dose of vaccine per cent



Source: Our world in data

<sup>8</sup> <http://thecitypaperbogota.com/bogota/worst-month-for-covid-deaths-in-colombia-protests-roadblocks-continue/27602>

During the pandemic, the contribution to GDP and the number of workers in fisheries and aquaculture has risen. A temporary slump in other commercial industries, showing how fishing can be an activity to fall back to when other more profitable jobs are disappearing, might have contributed to this effect. Data suggest GDP growth from primary sector to be positive even prior to the pandemic. The table shows that Colombia's share of value creation coming from primary sector has had a modest increase the last years. Fisheries and aquaculture seem to be a minor share of this value creation.

**Table 3.1: Agriculture, forestry and fishing, part of value creation. Selected countries and years (Percent)**

<b>Data unit</b>	<b>1990</b>	<b>2000</b>	<b>2011</b>	<b>2015</b>	<b>2019</b>
Bolivia	15.35	12.97	9.77	10.24	12.22
Brazil	6.87	4.75	4.34	4.32	4.44
Colombia	17.07	8.31	6.09	5.98	6.74
Ecuador	20.52	15.40	9.60	9.45	9.00
Peru		8.07	7.10	7.05	6.96
Venezuela	5.21	3.93	5.01		

Source: World Bank database

Some argue that the future of fish production in the world looks promising. According to Economist Intelligence Unit, fish consumption and prices are likely to rise in the coming years in world markets. Their view is that COVID-19 may have a lasting impact on food consumption habits, away from red meat and towards fruit and vegetables, but also fish. EIU stresses that they expect consumers to be increasingly focused on sustainable food production. This means an opportunity for fish production, but also set clear demands for long-term sustainability and eco-friendliness of the production. Thus, profitability in fish farming and fisheries is likely to rise. Forecasts by MADR also show an expected increase in fish consumption in the coming years.

The last years' economic and political crisis in neighbouring Venezuela has led to a steady flow of refugees and immigrants into Colombia. Approximately 2 million Venezuelan refugees and immigrants have entered Colombia, the majority in the last five-year period. Colombia, with its recent history of refugees fleeing the country during the civil war, this spring awarded the refugees the right to register in Colombia and granted them the right to work and the right to public services like schools and hospitals. The immigrants are dispersed throughout Colombia but are most visible in the big cities where many hope to find a job. An influx of a large work force accepting low wages puts a downward pressure on Colombian wages. Especially people in positions requiring little formal education are vulnerable for experiencing reduced household income.

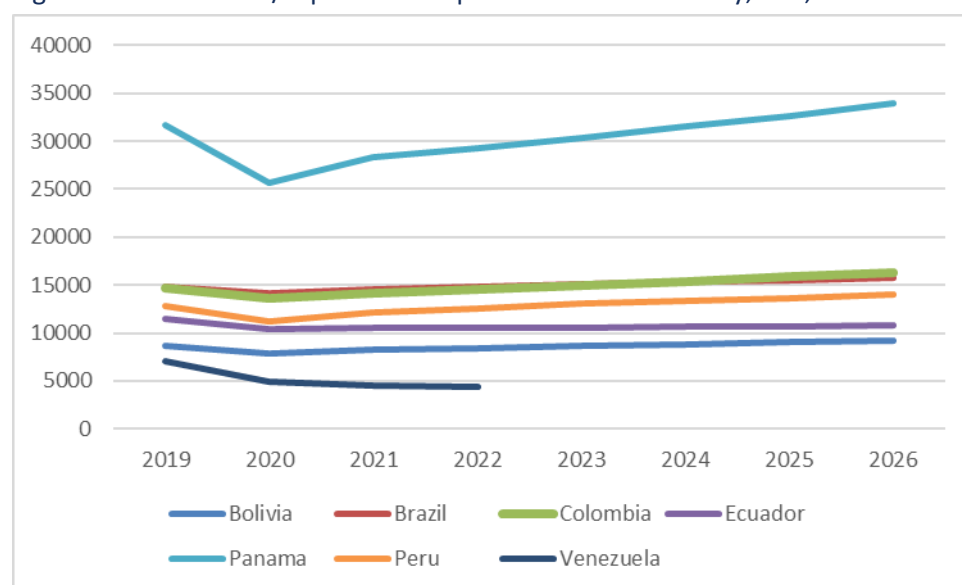
Some information sources indicate that tension is higher in some remote regions<sup>9</sup>, while other sources suggest that rural areas now is more stable than the cities. The peace process is young, and it is still tension in Colombia with risk for armed conflicts. Related to this, there is a security risk associated with working in certain regions. If the project is choosing among relevant cases for a pilot, as described in 5.4.1, the local level of stability should be assessed and be an important decision criterium.

<sup>9</sup> Current advice from The Norwegian Ministry of Foreign Affairs: The Ministry of Foreign Affairs advises against all travel and stays in the Catatumbo region in the county of Norte de Santander on the border with Venezuela. Furthermore, the Ministry of Foreign Affairs advises against travel or stays that are not strictly necessary in the province of Tumaco in the province of Nariño on the border with Ecuador.

Development of the fisheries and aquaculture is strongly affected by fiscal regulations. Understanding the impact of fiscal regulations on the sector is key, as the effect of taxation and subsidies tend to be strong, outperforming many other factors. Offshore licenses for deep water fisheries are sold by the government at prices depending on fish type, area and period. Colombia has some minor subsidies to fisheries, providing boats and fishing nets for artisanal fishers. Public revenues from fisheries comes from industrial fisheries and aquaculture, while most artisanal fishers do not pay taxes. As it is beyond the scope of this report and will need closer analysis, we will just mention on a general level that a situation where small-scale fishers do not pay taxes, while industrial fishers pay company tax, may lead to both suboptimal production and tax evasion. There are obvious positive distributional effects linked to food security, poverty reduction and income distribution. Tax reforms tend to have both efficiency effects and distributional effects, and the review team will just comment that these effects should be better understood.

The forecast for the Colombian economy is positive. IMF's medium-term GDP forecast<sup>10</sup> to 2026 shows expected growth in Colombia to be lower than for Peru and Panama and higher than Ecuador and Venezuela. The most recent update is from April 2021, and if the effect on forecast from the protests might not be included yet.

**Figure 3.4: GDP/capita in fixed prices National currency, PPP, selected countries 2019-2026**



Source: IMF WEO

### 3.3 The project's political relevance for Colombia

NORAD has asked for an assessment of the project's relevance to the political and governmental priorities in Colombia and an assessment of the project's relevance to the main challenges in the fishery and aquaculture sector in Colombia.

<sup>10</sup> GDP in fixed prices. PPP, IMF forecasts from WEO database updated april 2021

One year after the election in 2018, President Duque obtained Congress approval of his Plan Nacional de Desarrollo National Development (PND). The PND outlines the national government's plan for how it will dedicate its policy efforts and economic resources over the next four years. This proposal combines the government's financial resources, approx. 150 billion COP (USD 40 million)/year, with participation from organisations and industry. The government calls this 'co-creating together' and a form of engagement that will play a key role in building sustainable peace. The plan focuses on reaching agreements between different stakeholders and could be understood as an attempt to build peace through reduced division lines within Colombia.

The plan aims at alleviating poverty by stimulating the economy in several ways. The ambition is to reduce unemployment with 1%-point through the creation of 1.6 million jobs. Another feature of the plan is targeting the development of international trade and the promotion of foreign investment in Colombia. This is expected to stimulate the economy.

The PND is central in all public planning in Colombia and important for understanding policy development even in the fish industry. A 2014 Plan for Sustainable Development of the Aquaculture Sector (PlaNDAS) serves as a basis for an important part of AUNAP's work.

Colombia's political priorities for fisheries and aquaculture include:

- Increased activity and value creation in the sector, both in freshwater and in the oceans, and both in fisheries and aquaculture
- Job creation in fisheries and aquaculture
- Reducing import of fish by increased consumption of domestic fish.
- Increased investments (including foreign) in aquaculture and fisheries.

The review team finds the project relevant for supporting Colombia's goals. A major concern, however, is that the project might be too narrow in scale and scope to make a significant contribution. This is further elaborated in chapters 5.3-5.6.

Departamento Nacional De Planeación (National Ministry for Planning - DNP) has identified several obstacles to growth in fisheries and aquaculture:

- Outdated rules and regulations
- Reduction in resources caused by decrease in areas where fish spawn and smolt grow
- Low national fish consumption
- Fish- and aquaculture absent in regional planning tools
- Complex and expensive administrative procedures, harming investments and supporting in-formal deals
- Absence of guarantees and financial support that would help entrepreneurs get financing in credit markets.

Other key challenges identified in our interviews and document reviews are:

- Low economic productivity of aquaculture that reduces its competitiveness and reduces profitability. Tilapia and trout, the species that are most produced in Colombian aquaculture meets strong competition in the international markets. The cost of feeding the fish is high compared to the market price of the grown fish.
- Overfishing, resulting in i.a. reduced catches and profitability, and less secure livelihoods.

- Pollution, especially discharges of mercury and cyanide from often illegal gold extraction, but also pollutants from many sorts of industry. The resulting risks and impacts to human health can also harm consumer's preferences towards Colombian fish, and potentially harm the ambition for increasing domestic demand as well as export of fish.
- Low investments

NORAD also has asked why capacity in the sector is low. We believe the answer is related to structural characteristics. Fisheries and aquaculture are dominated by small-scale fishers and producers applying local competence based on experience. Also, fisheries of industrial sized vessels are probably relying more on experience than formal education.

Relevant capacity building for industrial aquaculture can be elaborated along the lines explained in section 5.4.2. Currently, the Colombian aquaculture is not very competitive, but capacity building, innovation in technology, reduction of diseases and domestication of native species will alter this in the future.

As explained in 3.2 the profitability of the fisheries and aquaculture may not be as high as in some other production, but the importance of the sector must be understood, including the fact that the fisheries support many jobs and local food supply. Fisheries create employment in regions where other industries are absent and function as a safety net. Norwegian expertise should look at ways to improve Colombian aquaculture practice in order to increase productivity and competitiveness.

The review team has not studied the distributional effects of increased revenues from industrial activities. When it comes to pilots and other local projects, the review team recommends a stakeholder analysis that can reveal any conflicts between project ambitions and local fishers and other stakeholders' interests. Besides that, we see no political-economic arguments that indicate that the FfD project should be cancelled.

### 3.4 Possible conflicts of interest between small-scale and industrial operators

Colombia has a small industrial fleet of some 150 national vessels. There is no information in the documents about the presence of foreign registered vessels in Colombian EEZ. In aquaculture, there are a few medium-sized enterprises. The rest are according to interviews only small-scale producers.

Internationally, there has been considerable concern for small-scale fishers and how their interests can be taken care of in fisheries management. A key document in this context is FAO's Small-scale fisheries guidelines (FAO 2014), which has been implemented in many different contexts (Jentoft et. al 2017). Better policies for small-scale fishers may also result from long-term political struggle, as in South Africa (Sander et al 2020: 5-6, with included references). According to an interviewee, Colombia has not adopted the Guidelines, but hope to use the project as a mechanism for learning more about them and possibly implement some elements. **The review team recommends that the FAO guidelines are included in the project outcome 2 and 3** as a basis for developing policies and management practices that addresses the needs of small-scale fishers and aquaculture producers. This is key to achieving the goals of the FfD programme and should also be pertinent since the UN General Assembly has declared 2022 as the international year of artisanal fisheries and aquaculture.



Competition over access to resources is a common source of conflict but is not analysed in the documents the review team had access to. The analysis stops with “overfishing” without any attempt to understand the reasons (weak governance?), attribute it to specific groups or see who is most affected. The industrial fleet with more modern technology has probably a major responsibility. However, there are many artisanal fishers, and they may in sum also put an extra load on certain stocks. **An analysis of the sources and reasons for overfishing as well as destructive fishing practices is needed as a part of the knowledge base to be developed in the project’s outcome 2.**

Competition between the two segments of fisheries can also take place over access to ocean space, with conflicts between different gears as one component. Colombia has reserved areas within 1 nm from the coast to artisanal fisheries. In a few special zones, such as the North Pacific CERA, this is extended to 3 nm. To what extent this is a satisfying compromise is unknown. **An analysis of competition and user conflicts could also be included in outcome 2.** Colombian as well as Norwegian experiences for solving this should also be included, both informal approaches between fishers and formal regulations.

NORAD has also asked about small-scale fishers’ lack of influence in decision making. Extensive research would be required to answer this complex issue, not least because of the many relevant decision arenas. A general observation is that the level of organisation among small scale fishers is low, their organisations often weak and that the communities may be the nucleus for organising, not dedicated organisations for fishers. Several academic publications contend that small-scale fishers have not been fully recognized as key stakeholders in the fisheries management process (Saavedra-Diaz et al 2016: 2). Participation may take many forms, including co-production of knowledge and co-management, both of which recommended by OECD in Colombia (2016: 22-23). One interviewee explained that there are examples of sharing of information with the communities, but little co-management. However, according to extensive interviews by fishers, community leaders and fisheries experts, there is a basis for developing co-management (Saavedra-Diaz et al 2016). A warning from this publication is that if the Colombian administration continues its centralized administration without support and involvement of the community level, future conditions may deteriorate (ibid: 19). Exploring better possibilities for participation and co-management therefore should be important tasks for the project to achieve a management system that is perceived as legitimate and acceptable, as emphasized by OECD (2016:17). It also seems that co-management would be in accordance with the government’s vision of co-creation (see 3.4) and a relevant response to the limited capacity and capability of the government apparatus.

### 3.5 Bottlenecks in licencing

Few Colombian fishers and aquaculture producers are formally registered; maybe up to 5% of the fish farmers, according to one interviewee, 2% according to the PD. This has numerous implications for the management, including the availability of information and reliable statistics, distribution of quotas, guidance, and support (credits, subsidies etc), and enforcement. The problem has been raised especially for aquaculture and is described in several documents (OECD 2016: 25, KPMG 2018; PD:13).

Low registration for aquaculture activities is immersed in a complex social problem, including low education levels. Barriers mentioned in an interview are: 1) the registration process is expensive and takes a long time; 2) it is bureaucratic and related to different institutions participating and providing different types of licences for production, sanitation, environment, processing and export, respectively; and 3) small producers make low profits and want to avoid fees. In addition, there is low capacity from government agencies to cover large and in many cases inaccessible areas.



The system for environmental licences for inland aquaculture has received particular attention in the project. It is administered by the Autonomous regional corporations for sustainable development (CAR). These are 33 regional bodies that are responsible for multiple areas of development, including environmental and natural resources management, having their mandate according to national law<sup>11</sup>. Obtaining a licence requires that the applicant informs about water usage, treatment and discharges, and land used (interview). There should be an EIA conducted by qualified experts. There are various pieces of national legislation describing that environmental monitoring for inland water bodies used for fish farming is required<sup>12</sup>. There is ongoing work in the Colombian administration to discuss whether the requirements for the small and medium scale producers should be eased, as included in the objectives of a presidential decree.<sup>13</sup> The Colombian government has a general strategy for making its services more efficient, called “Estado simple”, in which digitalization plays an important role. It is easy to understand the need for making the licencing processes run more smoothly. There are many interests that must be taken into consideration, for instance the risk of introducing invasive alien species and causing eutrophication. Norwegian administrative procedures for aquaculture therefore also involve many actors in complicated processes. The review team recommends that the environmental licencing process, including baseline data, strategic/regional assessments, EIAs and monitoring, should be explored more in depth in Outcome 3 (we have been explained that it to some extent will be). Our preliminary assessment, based on the limited information we have achieved, is that there probably is a need for strengthening environmental elements.

This project will target institutional capacity building in central government. The project should contribute to cooperation with the CARs, avoiding tension between central policy development and regional responsibilities.

## 3.6 Opportunities and barriers

NORAD has requested the team to consider opportunities and barriers for achieving the project’s operational goals. Issues related to this are addressed in especially sections 3.4, 5.4 (results framework) and 4.1 (risk matrix). Here, we will briefly highlight:

### Opportunities:

- The project is desired by stakeholders also outside the government administration
- Aquaculture and fisheries have increased its economic importance the last year
- There are identified needs for improvements both for fisheries and aquaculture
- Colombia has a well-educated middle class and many competent employees in public administration.
- Colombian universities and academics are recognized as among the best in Latin America
- There are national plans with ambitions for the sectors

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<sup>11</sup> See information from their national organisation at <https://www.asocars.org/> , and <https://tierracolombiana.org/corporaciones-autonomas-regionales-de-colombia/>

<sup>12</sup> MADR-Decree No.1541-1978 surface water use concessions; Act No. 373-1997 on the National Efficient Water Use and Water-Saving Culture Programme; and MADS-Resolution No. 631-2015 defining physicochemical parameters with threshold values for discharges from different sectors, including aquaculture, and requirements for their monitoring.

<sup>13</sup> Agreement for the sector”, signed by the Colombian president in January 2020.

- The project will be carried out in a part of the world where Norway has provided support for conservation of forest and biodiversity. There is a potential for synergies with such projects.

**Barriers:**

- Still tension in Colombia with risk for armed conflicts, especially in rural areas
- Related to this, there is a security risk associated with working in certain regions
- Political instability, riots and distrust towards the government
- COVID-19 with the recent surge of cases; restrictions on travel etc. may continue.
- Economic slump and generally low tax levels in Colombia, restricting the government's economic capabilities.
- Lack of investors may lead to slow progress and difficulty in finding co-funding for a pilot
- Diminishing fish stocks, pollution and other negative impacts limits the potential for achieving sustainable growth of the sector
- Norwegian competence on freshwater aquaculture and small-scale production is limited

## 4 Risk analysis

### 4.1 Risks for project performance

Annex 3 to PD presents a Risk Analysis that consists of:

- A Risk Matrix which makes a distinction between external and internal risks; and
- Identified risks of unintended consequences of the project

During the discussion with NORAD about the present assignment, it was agreed to make a distinction between risks and safeguards, which were reflected in the ToR/Approach document:

**Risks** are the most important issues outside the project management's control that could negatively affect the project's performance. These could include political-institutional risks (including corruption), economic-financial risks, social risks, and environmental risks.

**Safeguards:** Measures needed to comply with the principle of "do no harm" and to avoid that the project would contribute to adverse unintended consequences, especially in the four crosscutting issues in Norwegian development policy: human rights, anti-corruption, climate and environment, and women's rights and gender equality. The assessment of the PD has also considered measures to avoid inadvertently contributing to elite enrichment without poverty reduction, and the undermining of government responsibilities.

This distinction between risks and safeguards is in line with international standards used by most development agencies, the UN, development banks, etc.

#### "External risks":

It is positive that the proposed risk matrix considers probability and consequence of occurrence, as well as risk mitigation measures, which give the opportunity to focus on the main risks. The review team however considers that some of the most important risks have been left out. These include lack of reliable data on fish stock, species and exploitation, inhibiting efficient planning, as well as potential spread of invasive alien species (IAS) into natural ecosystems (see table).

It is important to highlight that real project risks are "outside project management's control". These issues include for instance change of political priorities, staff and budgets due to political changes, which could be a reality after the change of Government in Colombia that will take place during the project implementation. It could also include financial shocks, social uprising, natural disasters, etc. Project management has no way of preventing these to occur, but it is possible to prepare and mitigate the impact in case of occurrence.

The PD considers that the major external risks that can negatively impact project implementation and achievement of desired results are "that proposals for improved regulation, management measures and guidelines are not adopted and implemented by the Colombian government", and that there is insufficient government funding such that the fisheries and aquaculture management institutions in Colombia are not able to deliver on their mandate. The review team does not agree with this analysis:

- Even though, based on the draft PD design, it would be a risk that project proposals for regulations and guidelines are not adopted and implemented by the Colombian government, the weakness in the design is that a project results should not depend on the national multi-stakeholder institutional process and final political approval, which often could take long time. It means that the project outputs should conclude with presentation of the draft regulations and related guidelines. The PD proposal includes the project outcome indicator 3: Number of new regulations adopted, and two project outputs that are approved guidelines: (i) National Guidelines concerning participation in RFMOs; and (ii) Guidelines for minimising water pollution from aquaculture. Often the final guidelines would be politically approved and implemented after the project has closed, especially if the draft was finished towards the end of the project period. This does not make the project less effective. The project impact and sustainability would depend on the Government's approval (after some changes) of the measures and guidelines proposed by the project. This impact could often occur after the project (or first project phase) has ended, and the potential impact should therefore be part of the final evaluation.
- Insufficient government funding for the institutions responsible for fisheries and aquaculture management is a real risk. It is however a risk that can be avoided under the current government, since AUNAP (under MADR) has been instrumental in designing the PD. The Norwegian government should assure that project co-funding through AUNAP and ICA is confirmed in the funding agreement, and that incompliance would be a valid reason for not continuing project funding. However, the review team agrees that insufficient government funding could potentially be an issue after the change of government, when there normally are large institutional and budgetary changes.
- There are several other risks that could negatively affect the project performance, and some of them (pandemic, social unrest) are already occurring. It is therefore a question if they should be considered part of the project baseline instead of a risk.

#### **"Internal risks":**

Even though "internal risks" sometimes are mentioned in risk analyses, the review team is not in favour of including such risks because they could easily be an excuse for deficient project planning and bad project management, including inefficient lack of control for monitoring of results. There are many measures that can be taken from the project management unit (PMU) side to avoid such "risks", e.g. (i) a solid inception period (described in 5.4.1) where the project operational rules are defined, e.g. by-laws for the steering committee, and regulations for who should take which decisions and the order of decision-making; (ii) Colombian rules and regulations to comply with, including preconditions for externally funded projects before they can initiate; and (iii) ToR and recruitment process for project staff, review of staff capacity, and plan for needed staff capacity building.

The risk matrix considers as the main internal risks that relevant Norwegian or Colombian staff do not have sufficient time to put effort into the project, resulting in delays. This sentence could have been included in any project, and is not considered very relevant, especially considering the huge effort that both countries have gone through to prepare the PD. Another internal risk factor mentioned is that the activities are not planned sufficiently well and become less efficient. As mentioned above, this is not a risk, but poor project management and budgeting and can be avoided.

The risk analysis presented in PD Annex 3 has additional separate tables for each outcome. However, it seems like the risk analysis has been done somewhat isolated from the results framework, for instance,

under outcome 1: Proposed risk: Network with universities not established or not useful. This network is a project output under result 1.3 of the Results Framework. It is therefore not a risk. A real risk would be low interest from universities in participating in the network. Under outcome 2: Proposed “internal risk”: Implementation of mechanisms studied for reducing bycatch is not carried out. Implementation of the mechanism is not a project activity and would therefore not affect project performance. It could however be considered an external risk that would affect future impacts.

The risk analysis done by the design team at the output level concerns mostly minor risks that would not greatly affect project performance. Even though all the risks were analysed, (see appendix F), the review team recommends removing the risk analysis on this level since it is giving too much detail without adding much value.

**Table 4.1:** The review team’s analysis of most important risks<sup>14</sup>

RISK	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION	COMMENT FROM REVIEW TEAM
Lack of reliable data on fish stock, species, exploitation, etc.	Planning activities will not be based on correct information, and therefore have low relevance and impact, and would not assure sustainable management of fish stock	3	2		Project to support improvement of database and data quality	This key issue was not included in the proposed risk matrix, but is fundamental for baseline, planning, M&E
Lack of political support for implementing more sustainable management measures	No move towards sustainability, with potential consequence being further depletion of fisheries resources, and leading to environmental and fish health problems in aquaculture.	1	3		<ul style="list-style-type: none"> <li>-Increase public awareness by making data, analysis, and recommendations public.</li> <li>- CCC to discuss progress at least yearly and take action if insufficient progress.</li> <li>-Awareness of Project at highest level of the Colombian institutions involved</li> <li>-Invite CSOs to stakeholder meetings or present in project Annual meeting</li> <li>-Mid-term review, and reformulation if needed</li> <li>- Project outputs and outcomes in line with Colombian policy</li> </ul>	Additional to inviting CSOs to stakeholder meetings, these could be part of an external advisory group
Corruption/political interference related to enforcement of laws and regulations or granting of licenses	As above, and imbalance in economic benefits from the sector, especially negative for the poorest stakeholders	2	2		<ul style="list-style-type: none"> <li>-Focus on project issues where corruption could occur (e.g., procurement)</li> <li>-PMU to take part in national meetings about corruption</li> <li>-Learn from the UNODC project</li> </ul>	A relatively small project cannot do much about corruption but should focus on avoiding corruption in the use of its own funds, to work as an example. Especially important is to have clear rules and monitoring of their compliance for

<sup>14</sup> Complete risk matrix in appendix F

					<ul style="list-style-type: none"> <li>-Meetings with the CARs to increase awareness of corruption risks in licensing</li> <li>-Increased focus on local activities and beneficiaries</li> </ul>	procurement, recruitment and contracting
Large and sudden disease outbreaks in aquaculture or in terrestrial animals.	High economic losses, market closure and impact on food safety. Impact on ecosystems and biodiversity. Focus of project participants/veterinarians from Colombia diverted from project implementation.	2	3		<p>Biosecurity measures would improve as result of the project.</p> <ul style="list-style-type: none"> <li>- Change workplans to be able to use sudden disease outbreaks as part of the research, training and competence building.</li> <li>-Activate and update emergency response plans in ICA</li> <li>-Less focus on exotic spp and more focus on native spp with ecosystems-based methods</li> </ul>	This is an area Norway is well equipped to support
Spread of invasive alien species (IAS) into natural ecosystems	The escape of tilapia from fish farming and establishment of wild tilapia could result in the decline of native fish species and affect the entire ecosystem	2	3		The project will not support further development of tilapia production or other IAS but concentrate on species that are not known to be invasive. The project would support research into opportunities for cultivation of native fish.	The spread of IAS is an increasing problem in the world, highlighted by e.g., UNEP, IUCN and UNCBD. According to the Global Invasive Species Database, tilapia is a serious invasive species.
Natural disasters, political unrest, security issues or pandemic limits travel and some project activities	Project implementation hampered, planned activities postponed	3	2		<ul style="list-style-type: none"> <li>-Virtual meetings and online training where possible</li> <li>-Project scope and content designed to limit the risk that project activities are affected</li> <li>-Review information from relevant authorities that assess risks for natural disasters prior to planned activities</li> <li>-Strengthening of community-based activities that could continue even in moments of national crisis</li> </ul>	Some of these issues are already happening, so the probability is 3. The last mitigation action was added by the review team. Note that even though Colombia still has a high homicide rate, the figures have gone significantly down since year 2002, and is now lower than many other countries in the LAC region.
Colombian institutions are modified by new governmental management schemes	Changed priorities by the new authorities affecting priorities, budgets, and staff members	1	3		<ul style="list-style-type: none"> <li>-Colombian government to assure that responsibility for the project is clearly defined in case of institutional change</li> <li>- All project staff recruited by the Colombian institutions involved in the FfD project will be on technical merit, and with contracts that go beyond the period for the current government that may ensure the FfD project continuation.</li> </ul>	Note that consequence was changed since original text had little to do with the mentioned risk

					-Immediately take action if adaptive management is needed.	
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4.2 Safeguards

The project design (PD annex 3 – last part) presents a table called “Identified risks of unintended consequences of the Project”, which is in fact the project’s safeguards. As mentioned above the safeguards are those actions that are needed to comply with the MFA-NORAD principle of “do no harm” and to avoid that the project would contribute to adverse unintended consequences. The review team considers that the project plan should plan to avoid unintended consequences (through safeguards), not to mitigate them.

In appendix F to the present report, we propose to take out the centre column since the planning as mentioned should focus on avoiding occurrence, and because it does not add anything since all issues are marked with the same colour. The general principle has been reviewed with focus on the four cross-cutting issues in Norwegian development policy.

**Human rights:** The text “unlikely to have unintended negative consequences for human rights” is proposed taken out, because the safeguards have the purpose of assuring this, independent of the probability. The review team considers that there is in fact certain possibility that ethnic or social discrimination (as well as gender discrimination, see below) could happen for individual project activities, such as training events. It is even more important to be alert in this period of transition after the peace agreement, when former guerrilla soldiers should be integrated into society, while hostility is still maintained between different groups. It is not enough to say that discrimination will not happen, because the project should take measures to assure active participation of minorities. It must be planned for each individual activity, but it is important that the PMU has the HR goals clear and included in their job descriptions. Another important human right related aspect of the project is the improved food security from strengthened fishery and aquaculture.

**Anti-corruption:** It is a known fact that corruption is present in Latin American societies, and the Colombian fisheries and aquaculture sector is no exception. Weak governance is one of the main causes of the poor condition of fisheries and is characterized by corruption, lack of stakeholder participation, political will and capacity, weak institutional capacity and capabilities, poor enforcement, and inadequate information (CRG et al 2006, ref. in Saavedra-Diaz et al 2016). According to some of the interviews carried out during the review, this description from some years ago seems valid even today.

There is however no indication that corruption is stronger in the fishery and fish-farming sector than in other sectors, but it is present e.g. in public processes for licensing, where weak local capacity and low salaries are incentives for small-scale bribery. This is a problem for the fishery and aquaculture sector but not a particular risk for implementing a FfD project in Colombia. On contrary, the relatively low profitability in the sector compared with other sectors is a factor that limits the linkages with domestic

and international crime. Money from the drug trade has been flowing into more profitable sectors in remote jungle areas, especially illegal logging and gold extraction in tropical rivers.

The PD design considers that increased transparency will reduce the possibility for corruption and political interests interfering with the implementation and enforcement of management measures that will contribute towards sustainable management of fisheries and aquaculture. Even though transparency is positive, it is a relatively weak measure. A small project such as the FfD project in Colombia would not be able to do much to reduce corruption, however it could function as an example for how to avoid corruption within the framework of a project, especially the use of project funds. This would especially include procurement and contracting, as well as recruitment of project staff and consultants. The review team added the following measures:

- Clear rules for procurement with project funds (Norwegian funding regulations) and follow-up on audit observations
- Clear rules for recruitment and contracting (TOR, staff requirements) and monitoring of compliance

**Climate and environment:** The first and most important measure in terms of climate and the environment is to comply with Colombian law, rules and regulations on environmental impacts. That means to screen investments (relevant for fish farming) for potential negative environmental impacts, and to carry out an EIA if required. Internationally funded projects are not excepted from following these regulations. In case of co-funding, the review team considers that the issue should be important for Norway even if Norwegian funds are not involved, because MFA-NORAD would like to avoid negative impact from co-funded activities. It therefore refers to the proposed project pilot and investments financed by any other source if it is carried out with advisory from Norwegian specialists. This issue has not been considered in the project design, which only says that “the Project aims to achieve the opposite” and refers to planning of the activities. EIA is under the responsibility of the Ministry of Environment and Sustainable Development (MADS), while the regional development corporations (CAR) are in charge of the process on local level. As mentioned under the assessment of the project management structure, the review team recommends including a delegate from the “Marine, Coastal and Aquatic Resources Affairs Direction” (DANCRA) at the MADS in the project Steering Committee CCC, which would be an assurance seen from the Norwegian side that potential environmental impacts have been considered, as well as climate change and other environmental issues. During interviews with the Planning Department and the Ministry of Agriculture, both mentioned that they work closely with the Ministry of Environment and would have nothing against this ministry being incorporated in the project.

The review team has added the following two measures:

- Comply with national environmental regulations (considering when EIA is required) and assure that EIAs are carried out according to high quality standards.
- Joint Coordination Committee (CCC) to include MADS

Regarding the risk that the project could lead to increased GHG emissions, the PD defines two safeguards, while the review team has added one:

- Establish good communication between partners such that activities can be planned and executed without excessive travel
- Improved food security based on fish rather than meat would decrease greenhouse gas emissions.



- More nature-based solutions for fish farming in rivers, lakes and lagoons instead of constructing fish tanks.

### **Women's right and gender equality**

The safeguards included in the design under “gender equality and women’s rights” are all good measures, however the review team considers that they could be more specific, and proposes to include two concrete measures:

- Assure women’s participation in all project activities and on project decision-making level (especially CCC) and advisory committee.
- Consider women’s views in the project design and implementation.

PD par. 6.4 has a good analysis on women’s rights and gender equality, but it is not clearly reflected in the design, where it quite weakly says: “Gender mainstreaming may be supported .....” and “The FfD project will try to head for a gender balance in all activities...”. It is also curious that the results framework has no gender relevant targets, not even for participation in education and training.

**Other issues** NORAD also has requested an assessment of measures to make sure that the project does not contribute to political destabilization, elite enrichment without poverty reduction, and the undermining of government responsibilities. The review team considers that since the topic of the project is not politically sensitive, there is low possibility that it could contribute to political destabilization. However, there are different views within the fishery and aquaculture sector on the best ways forward, based on socioeconomic, social and environmental considerations. The danger of elite enrichment without poverty reduction could be a reality if the FfD project mostly focused on large private sector beneficiaries (ocean industrial-level fishing) and not community level aquaculture in poorer regions of the country. The review team considers that the decision to focus on fish-farming and aquaculture is a good choice with high potential for supporting the poor, however the selection of region(s) and beneficiary communities for a proposed pilot should consider the goal of poverty reduction.

The review team considers that there is no possibility that the project would undermine government responsibilities, since it is the Colombian government that is in charge of implementation.

## 5 Project appraisal

### 5.1 The project's relevance to the FfD-programme

The overall goal of the FfD programme is “poverty reduction”. This is to be achieved by three outcomes, two of which are relevant for this project: 1) The authorities manage fisheries resources and aquaculture production in a sustainable manner; 2) Research and educational institutions assist the authorities with knowledge, data and advice about sustainable fisheries and aquaculture. The project addresses these challenges clearly. However, there are several limitations that means that it at best can give a partial contribution to achieving the FfD outcomes.

Reaching the overarching goal of poverty reduction requires Colombian policies oriented towards this end and the implementation of effective means to achieve it. We have not explored to what extent that is the case in the fisheries and aquaculture policies and practices (ref sections 3.2 and 3.4 for some reflections). As regards FfD's outcome 1 on sustainable management, the project does not consider all the dimensions of sustainability in a balanced manner. Even for addressing environmental and resource-economic dimensions, it aims at providing an insufficient knowledge base. Improving the effectiveness of management for these objectives requires not only information on the natural environment, but also knowledge on the conditions for and actual performance of managing mostly small-scale fishers and producers, operating in a natural environment like Colombia. (ref. section 5.2). Moreover, the project aims at providing knowledge. Colombian authorities must consider recommendations and eventually adopt and implement them before the FfD outcome 1 can be obtained.

As regards FfD outcome 2, research institutions and universities are supposed to be involved in the project. In an interview, we have been explained that there is not a strong tradition for involving universities in the management of fisheries and aquaculture in Colombia. Thus, there is a need to secure their participation in the project (ref output 1.2, organisation and budget). In a situation where data deficiency is a severe impediment to better management, it should be a key strategy in Colombia to involve all relevant knowledge holders and compile their contributions in shared databases. Norway has tried to improve this i.a. by the involvement of different sectors in the ocean management plans and platforms such as BarentsWatch<sup>15</sup>, and therefore has relevant experience to share. One of the experiences from Norway is that this has contributed to reducing conflicts about facts and increasing collaboration and trust between the involved parties. The project should include developing strategies and practical solutions for compiling and sharing relevant knowledge and data, for instance starting with improving SEPEC (see Appendix D) or with pilot projects on certain topics or in certain regions.

### 5.2 Competence needs

The competence needed for addressing outcome 4 on fish health in aquaculture and many of the competences needed for output 2 on marine fisheries are represented well in the project team. Here we will address more problematic issues related to two needs for competence.

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<sup>15</sup> See <https://www.barentswatch.no/en/>

### 5.2.1 Freshwater versus saltwater aquaculture

There is a striking mismatch between Colombian and Norwegian aquaculture sectors both in terms of the marine – freshwater balance, and the technological levels. In Colombia, the legal definition of “continental aquaculture” includes a gradient of technology levels, from sowing of fish in natural water bodies without any subsequent management (“repopulation”) to intensive aquaculture (Conservation international 2020). Low intensive production for instance in ponds dominate. In Norway, “repopulation” is referred to as fisheries cultivation and has a long tradition. There is a limited experience on the less intense types of cultivation that can be found in Colombia. Industrial and intensive salmon farming dominate the Norwegian sector, however, including an inland freshwater phase where eggs grow to fingerlings in flow-through systems (FTS) or recirculating aquaculture systems (RAS), before being moved to cages in the fiords.

This does not mean that Norway cannot give advice on aquaculture in Colombia. There are generic issues such as fish biology, genetics, water quality, pollution from feed waste and faeces, escapes, and sustainable feed production. However, FfD in Colombia will benefit from including supplementary expertise from countries with more similar technology levels in freshwater aquaculture to give relevant advice on outcome 3.

Another issue related to this is that the management of inland fisheries and parts of what is considered as aquaculture in Colombia, pertains to the environmental administration in Norway. The same administration has important roles in pollution abatement from i.a. aquaculture and is responsible for integrated water management (ref output 3.4). The Norwegian Environment Agency therefore should be involved in the activities to provide Colombia with a relevant comparison.

Finally, there is a need for competence on freshwater quality and ecology related to the programme. As mentioned above, impacts of aquaculture on the freshwater ecosystem, including native fish that are harvested, should be taken into consideration when giving advice for a better management system. Moreover, activities on integrated water use management, as suggested in output 3.4, require special competence on the different sources of pollution and their effects, specifically in freshwater systems relevant for Colombia.

### 5.2.2 Competence on socioeconomic conditions and regulations

A common framework for studies of fisheries management divides the management system into two main units: The governance system and the system-to-be-governed (Kooiman et al 2005). The latter consists of the natural ecosystems as well as the humans that exploit the resources. However, only the humans can be managed; ecosystems and the natural environment are only managed indirectly. For making this system governable in the sense that it produces desired outcomes, knowledge is needed about all the elements in this framework and the interactions between them.

This seems not to be reflected well in the programme. The outcomes contain several explicit requirements for better knowledge about the resources. However, there are no requests for better information on the situation, opportunities, and perceptions of those that are to be managed. This should be a crucial part of the knowledge base that is referred to in several outputs, including 2.3 about FAO’s Ecosystem Approach to Fisheries, which includes socioeconomic issues. Similarly, there is a need to include knowledge on how different types of management systems work and how they have succeeded or failed towards different target groups and challenges. In this regard, Norwegian experiences may only be

partly relevant. Norway differs from Colombia in many contextual issues, so Norwegian solutions cannot be copied; elements may be adapted to the Colombian reality. Both the Norwegian and the Colombian parts in the project need to understand the other's context to facilitate such adaptation. We will recommend that the competence of the programme is supplemented by social science competence on fisheries and aquaculture management in an international context beyond Norway.

### 5.2.3 Lessons learned from prior foreign assistance

NORAD also has asked about the use of lessons learned from similar projects, including experiences with inland aquaculture. While Colombia is new in this context, Norway has been engaged in inland aquaculture in Africa. This has been criticized harshly by Norwegian experts (Bistandsaktuelt 2017), claiming that 1) Aquaculture leads to detrimental damage to freshwater ecosystems, i.a. due to oxygen depletion and the introduction and spread of farmed fish, such as tilapia, that replaces local fish stocks, including those harvested; 2) Aquaculture does not benefit poor people; traditional inland fisheries produce fish more cheaply; 3) The potential of inland fisheries is underestimated; catches in Africa grow by 4-5% annually; and 4) Most aquaculture requires more protein than it produces. In the following debate, they were accused of making too general statements, i.a. not distinguishing between small-scale and industrial aquaculture<sup>16</sup>. Our concern here is not to say who is right about Africa. The key issue is that the objections they present are serious and must be considered in a Colombian context. Experience from foreign assistance in i.a. Africa should be brought into the project when addressing them, combined with evaluation of Colombian experiences.

As regards the Norwegian participants' use of such knowledge, it is important that the individuals that are selected for the programme are well familiar with experiences from tropical climate. This must be considered in the selection of personnel for the programme and their training.

## 5.3 Assessment of the results framework

The project management structure, efficiency and quality:

The review team considers the Results Framework (Annex 1 to the PD) as the core of the project design, because it should clearly define what the project will achieve and when the different partial results are expected, which makes it different from a standard logical framework. It is a planning and monitoring tool that is useful for the project manager, the project management unit and the supervisors on Colombian and Norwegian side, as well as the basis for progress reports and evaluations. Under the condition that it is well prepared with specific baselines and targets it is an efficient instrument for planning, monitoring, reporting and control.

The positive side of the Results Framework presented is that it reflects that the design team understands the structure and purpose of a results framework. On the other hand, it seems like this annex has been prepared in the end, and has not been finalized, because it lacks consistency. It is for instance lacking several baselines and targets. It is also important to assure that each baseline and corresponding targets are measured with the same value (e.g. numbers with numbers). A target without a baseline has no value, and in those areas where nothing has been done before, the baseline would be zero, then

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<sup>16</sup> Lenke: <https://www.bistandsaktuelt.no/arkiv-kommentarer/2017/ensidig-om-fiskeoppdrett-i-sor/>

only measuring the project's own result. In all cases where baseline is not zero, the target should measure the total on different years (including baseline) to facilitate monitoring. In the cases that the lack of baseline is due to lack of data, it would be necessary to carry out a baseline study, to be done as soon as possible or not later than during the inception phase. It is not the review team's role to update the Results Framework and defining targets because that would require additional information, however all its content has been reviewed and suggested changes were included in the table. One aspect to highlight is that there are no gender relevant targets (see 4.2).

### 5.3.1 Assessment of the description of the current situation/baseline

The description of the current situation in the sector is relatively good, but the problem is the lack of updated and reliable data that could function as a baseline for the project. This is the case both for the ocean and for freshwater, as well as for both fishery and aquaculture. A clear weakness is the lack of information on inland fish resources. According to information obtained during interviews and from other sources, this is not a weakness only for the PD, but reflects the situation in the sector, which is strongly limiting the possibility of efficient planning and sustainable management of the resources. To address this issue, the review team recommends two measures:

- To carry out a baseline study during the inception phase for all targets in the results framework that are lacking baseline figures; and
- To support AUNAP and the Colombian Government in general in improving its database on fisheries and aquaculture.

The review team has assessed the expected project effectiveness (impact, outcomes and outputs). Annex 7.6 presents detailed comments to a lot of the indicators and baselines. It would be the best to reduce the number of indicators on impact level, and only maintain those that have a reliable baseline and possibility to measure progress. The indicators should only cover issues where the project has a reasonable impact, considering the size of the intervention and type of outputs under each outcome.

Table 5.1: Review of baselines for impact level

Issue	Current proposed baseline	Review team's comments
Marine fisheries Capture (2019)	94.000 tonnes	"Marine capture increased..." should not be an impact indicator for the FfD project because: (i) Current marine fish stock is going down, with unsustainable capture level; (ii) Marine capture is an unreliable indicator for available fish stock; (iii) There is not reliable baseline data; (iv) The project is too small to have any impact on overall fish stock; (v) The project is focused mostly on fish farming/aquaculture
Total aquaculture production (2019)	171.000 tonnes	Good impact indicator for the project
The aquaculture and fisheries share of GDP	0.2% (and 3.2 % to the agriculture Sector)	Should only include % of total GDP, because: (i) this sector is not agriculture; and (ii) the income from agriculture varies a lot (therefore not a useful indicator for this project)
Income generated from the fisheries sector (2019)	USD 112 Million	These two data were presented as a common indicator: Proposed to separate
Income generated from the aquaculture sector (2019)	USD 52 Million	
Value Added Tax (VAT) generated from the aquaculture and fisheries sector (2019)	16 % (USD 26.2 Million)	A better indicator for the project would be VAT from only the aquaculture sector

Source: Vista Analyse

RV Nansen was in Colombia in 1987. With Colombia as one of the three partner states in FfD, the Nansen-programme should pay another visit to Colombia. This will be important for achieving objectives about better information about the stocks and about implementation of the Ecosystem approach to fisheries (output 2.1, 2.3), as well as improving the knowledge base for marine aquaculture (output 3.2). While this may take a few years, opportunities for using other vessels for joint cruises with Norwegian personnel should be explored. It is of vital importance that the sampled data are relevant for Colombian fisheries management, accessible for Colombian academic and government parties, and are being actively used in sustainable fisheries management.

### 5.3.2 Assessment of the main activities and main objectives

Even though not all information in the results framework has been filled in, it seems to be a clear relation between most activities and outputs, and between outputs and outcomes. There is however no realism in the relation between the outcomes and the expected impact "Improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors". First of all, grammatically this sentence implies that the sector is sustainable today and will be improved. Secondly, the project is small and only focusing on institutional capacity building in certain thematic areas, so it is a too huge step to go from this to sustainable socio-economic development for both the fisheries and aquaculture sectors. Even though the proposed project impact could be a long-term goal - maybe the institutional goal for the two target institutions - the design team should try to define the project impact, that would be

reached at the end of the project or short time after. An option would be “improved public sector capacity for management of the Colombian fisheries and aquaculture sectors”.

The review team considers that the project has consistency and realism in what has been proposed. Regarding the indicator to develop national guidelines/plan for implementation of a one-stop-shop, this would be realistic during the project period if the target is understood as complied with when the project presents a draft (not including the consultation- and political approval process).

The main target groups for the project are AUNAP and ICA. The project is designed to prioritize activities that will enhance these institutions’ capacity for sustainable management of fisheries resources and aquaculture production. It is however a weakness that the PD doesn’t define how the capacity building would (indirectly) benefit local stakeholders such as fishery communities and organizations, aquaculture producers, etc.

The review team recommends incorporating a local pilot. Our suggestion is to choose a local region in Colombia and use current activities there, including procedures undertaken by the local institutions, as valuable real-life input to the project. This will include contact between central agencies and regional offices.

The project should also, as previously mentioned, support data gathering and management, which would benefit both the two Colombian institutions and the project itself.

### 5.3.3 Theory of change

The review team has assessed the causal links between the problem description and chosen objectives and activities (theory of change - TOC). The project document describes a lot of problems in the sector, but it is difficult to find clear links between the project outcomes and resolution to these problems (except for disease control).

The problem lies in the design process, which normally for a TOC analysis starts with establishing a problem tree (in this case it could have been two, one for fisheries and one for aquaculture). The problem tree establishes the causes, main problems and consequences, and the analysis discovers that some problems are the main ones – while others are sub-problems of the main problems. Once the problem tree is agreed it is relatively easy to establish the TOC for a project, which could focus on only one main problem, but preferably should check that someone (maybe other projects) is covering the other main issues.

In the case of the Colombian FfD project, the process was completely different: It started with gathering a long “wish-list” that the two Colombian institutions would like to get financed, then reducing the number in dialogue between Colombia and Norway, considering as an important element which services Norwegian institutions would be able to provide. The problem with this process is that it does not guarantee that the project would focus on the most important problems. The wish-list process most often leads to parallel activities and individual outputs that are resolving some problems but gives low total impact. For the FfD project it is reflected in the very little relation between outcomes and impact.

The project proposal has the advantage from a TOC point of view that it concentrates mainly on institutional capacity building. The review team is not able to tell if the outputs prioritized are those that would lead to the strongest outcomes and impact. Some very important activities might have been taken out

simply because it was considered that Norway would not be able to provide them. That is no problem if they are covered by other sources or projects, and that donor coordination is assured. However, the project should be able to include expertise from other countries than Norway if needed, and if experts are found in other tropical countries it would comply with the NORAD goal of supporting south-south cooperation.

The Theory of Change as presented in the PD including fig 1 clarifies that the project design is a series of activities and outputs mostly in parallel, and the TOC for the 5-year project period would in fact end with “proposals for new regulations...”. Since it will take time before new regulations are discussed, approved and implemented, the next three levels in the TOC diagram would in the best-case scenario happen ex-post or during a second project phase. It is recommended to define an immediate impact, also called “project impact”, that would be reached during implementation (see also review of Results Framework). The project design would have benefitted from support of an expert on project design and TOC, to facilitate a participatory TOC exercise and restructure the design. This is more than just a formality because it would clarify which issues are important, including drivers and barriers for each step.

Considering the long design period and the positive attitude of collaboration from both countries, the review team will not propose starting from scratch with a new design process, however it would be beneficial for the effectiveness and efficiency of the project implementation that the TOC is re-visited during the inception phase. The TOC should then define a matrix of activities with a logical sequence, including interrelations between the activities (what comes first, and which outputs must build on other outputs). A useful operational tool for this exercise is MS Project, which also considers the time needed for each part of the process (consisting of many micro steps).

### 5.3.4 Monitoring and evaluation

The monitoring and follow-up of the project propose to use annual work plan for planning and coordination. The activities shall be monitored quarterly in the Joint Implementation Group (CCC) and the results reported annually. Even though it is not specified in the PD chapter on project follow-up, the review team assumes that the results framework will be basis for the monitoring. The results framework (when finalized and corrected) is a simple user-friendly monitoring tool. The Project Manager (leading the project management unit) must oversee the preparation of annual work plans, update the results framework each quarter, and on this basis prepare the annual reports, to be presented to the CCC and discussed in the Annual Meeting. The Results Framework should be used as the main planning, monitoring, and reporting tool. This might seem obvious, but it is not uncommon that the project management unit (PMU) forgets about the results framework after the project is approved and starts preparing annual plans without considering the content of the framework. The fact that the results framework is not yet finalized gives an indication that this could happen, so it is necessary to raise an alert. Each annual report should present the updated results framework with the results achieved on each target, and comment on progress and possible delays.

The PD proposes that project risks should be monitored and managed by the CCC. This is not operational, because the CCC would consist of different persons in the two countries. The Project Manager must oversee updating the risk matrix as a continuous process, and at least quarterly, and report on it to the CCC as an annex to the yearly report. Any changes in the matrix should be discussed in the CCC and the Annual Meeting.



The Annual Report should also inform on how safeguards have been dealt with and highlight any issues that could have come up during the last year, including crosscutting issues given priority by the Norwegian cooperation - human rights, women's rights and gender equality, climate and environment, and corruption.

The PD has no detail on the reviews to be carried out. We propose that the project should have two reviews/evaluations:

- Mid-term review (MTR) is done by an external team, with a focus on effectiveness and efficiency. The MTR should recommend any changes that must be done to improve project performance, and the report would be discussed in CCC. CCC then decides which actions to take (during year 3)
- Terminal evaluation (TE) is also done by an external team and will cover all the OECD-DAC project evaluation criteria. If a second phase is expected, the TOR for the TE could also include assessment of the draft proposal for the new phase (during year 5).

## 5.4 Project management structure

### 5.4.1 Assessment of the project management structure

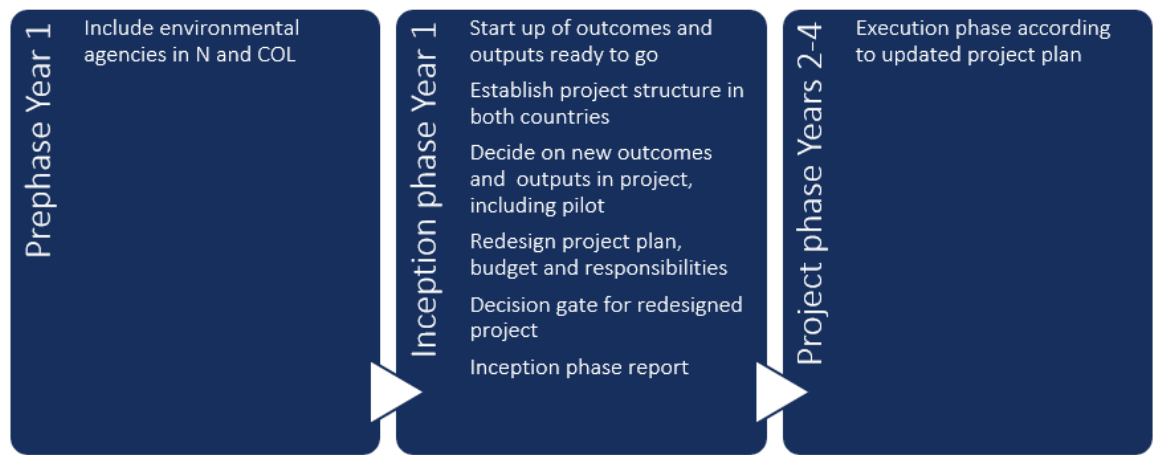
Project management has not been awarded a specific organisation or person. The project has probably underestimated the need for project management, and it will increase with our suggested amendments. We believe good coordination is important on both sides, and of vital importance in Colombia. We see that the involved partners have the will to drive the project through. A larger project that includes a pilot might lead to a situation where a dedicated project manager can help the project succeed. Spanish lingual skills would be a clear advantage. To assure effective and efficient project management, a Colombian counterpart person should be determined, and a project management unit (PMU) established with participation of staff from the institutions involved.

The PD mentions, additional to the Ministry of Agriculture and Rural Development (MADR), AUNAP and ICA, several other Colombian stakeholders that would be involved, including FEDEACUA, the university sector, ANALDEX Tuna Industry Chamber, ACODIARPE Industrial and Fishing Vessels Owners Association, the National Fishing Promoters Association APROPESCA, and Small-scale Fishermen Associations. These have been involved during the design phase, which is a strength. It would be an important task during the inception phase to consult with all relevant stakeholder groups, including those mentioned, the Ministry of Environment (to be included in CCC), indigenous and afro-descendent communities, as well as women organizations or a MADR gender expert, to assure gender mainstreaming of the project content and activities.

Covid 19 makes a risk on/ risk off lever in project planning. Thus, we recommend seeing the first part of the project as an inception phase. The concept is briefly described in chapter 4. The inception phase reduces the need for having everything ready at start-up and opens up for using lessons learned during this inception phase in planning the project implementation design and activities in detail.

In the inception phase the budget needs are limited. The project start-up and implementation will not be slowed down by introducing this face, rather the contrary, because the inception phase would assure that the project is executed efficiently and without unnecessary bottlenecks. Obviously, introducing new partners such as the Ministry of Environment to the project group should be done from the start.

Figure 5.1: Description of phased project design



Source: Vista Analyse

The Inception phase can initiate activities that are ready to start. Budgets for this phase are likely to be sufficient. When Covid-19 restrictions are abandoned, travel is needed. The inception phase could end in a progress report, that gives an opportunity to adjust the project plan according to lessons learned so far.

As explained earlier in the report, we believe Norwegian competence on inland aquaculture is limited. The relevance of Norwegian technologies may also be of limited relevance. Thus, the project needs maturing mutual understanding and knowledge. The review team sees the need of competence building both on the Norwegian side and the Colombian side. The budget must include mutual capacity building. We recommend NORAD to reassess these matters.

Effective mutual learning means Norwegian participants should have a long-term perspective on their involvement and have time and interest of building their own knowledge on Colombian fisheries and aquaculture. One success factor of the project is to have a stable core team.

Colombia's neighbours such as Ecuador, Peru and Chile have more experience in aquaculture in tropical waters and mountain areas. The project might benefit from south-south cooperation, which is a priority area from NORAD's side. Whether this should be organized within FfD or a parallel project is beyond this review to consider. Both south-south cooperation and use of consultants with local expertise and Spanish language skills would be of significant help to Colombia.

Assessment of the chosen means of carrying out the program. Are there alternative activities, outputs and outcomes which are more effective for reaching the impact?

As described in chapter 5.3, the review team considers that the FfD project in Colombia lacks sufficient environmental competence and would probably benefit from including concrete results in the environmental area.

Possible added outcomes or outputs:

1. Integrated watershed management – Colombian waterways are important for the local communities by providing food, drink, irrigation, transport, potential sport and leisure activities and have aesthetic and natural values. Seeing all effects in relation to each other is an important aspect of all economic activities. The CARs are already doing important work in these matters. We recommend this field of work as an important part of inland aquaculture management. This workflow should consider potential environmental, economic and socio-economic effects.
2. Integrated marine management – When saltwater fisheries are included in the programme, focus on integrated marine management is important. This workflow may be linked to the Oceans for Development programme, securing coherence between the two different programmes.
3. Monitoring of fish stock and environmental factors in river systems – When assessing the environmental and socio-economic effects of new aquaculture projects in inland waterways or planned changes in inland fisheries, the initial situation of fish stocks should be estimated. Further, as new activities are introduced changes in fish stock and fish stock composition should be monitored.
4. Data collection and data management of fish stock data and environmental data
5. Invasive species. In the adjusted risk matrix introduction of alien *Tilapia* species or other IAS in the vulnerable ecosystems of Colombian waterways should be a major concern, focusing on local species as alternatives to industrial species from other parts of the world. Furthermore, look at regulations and procedures for avoiding introduction of new invasive alien species through commercial activities in Colombia.

Should the resources within the project have been distributed differently to increase goal achievement?

The review team recommends building a stronger environmental focus in the project. Environmental issues that should be included is described in 5.1. The relevant Norwegian executive agency for inland fisheries is The Norwegian Environment Agency. The project would benefit from including experts from The Norwegian Environment Agency. Our suggested new outcomes and outputs in the previous paragraph.

Symmetrically, we suggest including Colombian environmental agencies: Ministerio de Ambiente y Desarrollo Sostenible, Ideam etc.

In addition, we have also introduced the idea of an inception phase to establish the project before travelling makes it easier to carry out the whole project.

We suggest focusing on building up competence both on Colombian and Norwegian side, as Norwegian expertise on tropical freshwater aquaculture is limited. Thus, the Norwegian participants should be a stable, committed team of relevant experts with time and resources to focus on Colombia.

The duality of the project, where the complexity of Colombian nature and watersheds and the complexity of the existing regulations in Colombia on one side, and Norwegian complexity in industrial saltwater aquaculture and Norwegian regulations and advanced fish stock management on Norwegian side demands committed mutual competence building.

This should be included in the project plan and be reflected in budget.

## 5.4.2 Ambitions and resources

Are the ambitions realistic when considering the total budget?

The following recommendations from this report all support increasing the budget:

- It seems that project administration is not given enough attention.
- Two phases may increase administration.
- The inclusion of several issues raised in this report.
- Inclusion of Colombian and Norwegian environmental agencies
- Inclusion of time for Norwegian partners to increase knowledge of Colombian fisheries and aquaculture.
- Pilot

The review team suggests the budget to be increased for the whole project period, due to increased scope, need for competence development on both sides, need for local expertise in Colombia and increased need for project management.

For budgetary purposes, the need for mutual competence building might increase necessary travel needs beyond what has been planned for. Obviously, it will also take some project time.

Once the COVID-19 restrictions are removed, there might be a ketchup effect on travels. The first year after the inception phase is finished may lead to several necessary travels.

The quality of the underlying analysis and planning process of the project, including participation of relevant stakeholders in the process.

The process of developing the project has been long and included many people. The project description may suffer for being developed over time and with too little focus on creating consistency between desired tasks and the budget. This is described in chapters 5.4 to 5.6.

## 5.5 Coordination with other projects and programmes

The PD (p 27 – 29) refers to several other projects in the FfD portfolio in Colombia:

- International programmes that have a component in Colombia: UNODC's FishNet addressing fisheries crime and a FAO project on responsible fisheries and aquaculture.
- Projects (co-)financed by FfD in Colombia: A study by KPMG on private sector initiatives (KPMG 2018); two Caritas Norway projects on developing the skills of youth for the aquaculture sector and one on improving productivity, profitability and sustainability of tilapia production in two regions; two Conservation International projects on sustainable fishery management and poverty reduction (Eco Gourmet) and on a legal diagnosis of aquaculture in Colombia; and UNIDO's project on strengthening quality and standards in compliance capacity of shrimp and tilapia aquaculture (GMAP).

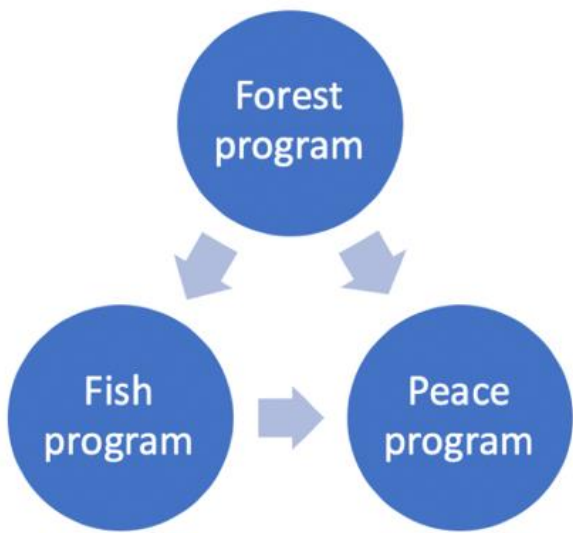
There could be projects financed by others that also are of relevance for FfD. The review team broadly sees two rationales for coordination. First, there is a need to avoid overlaps, ensure complementarity, coordinate efforts, find synergies and learn from experience gained in several projects. Second, there is a need for the Norwegian partners to the FfD programme to build knowledge about Colombia, both the general societal context and the specific nature of its fisheries and aquaculture. This takes time.

In the interviews, we have asked for coordination mechanisms. The Government of Colombia has a general mechanism for coordinating foreign assistance (APC). From the donor side, the Embassy in Bogota referred to broader mechanisms for coordination, which do not address fisheries and aquaculture. However, there are coordination mechanisms mostly by Colombian stakeholders in the fishery sector called “Mesas de pesca”. In the autumn of 2020, NORAD took the initiative to establish a network of actors with fisheries and aquaculture-related projects in Colombia that will meet at regular intervals to coordinate and share information.

The review team supports NORAD’s initiative for coordination and exchange of experiences. This should be maintained throughout FfD’s engagement in Colombia. It would be best to organize outside the current project since it will have a broader scope and wider participation.

In addition, we will highlight the need for better exchange of experiences, building of better Norwegian competence on Colombia and coordination of the work of Norwegian public and private organisations. As regards the governmental programmes, there are no coordination mechanism for Colombia between FfD and e.g. Oil for development and Norwegian International Climate and Forest Initiative (NICFI). There are also tasks in the FfD programme that can be expanded into an Oceans for development programme in Colombia. NICFI is by far the largest funding from Norway to Colombia and goes together with the Norwegian support for the peace process. Many communities including indigenous peoples are supporting nature-based solutions that involve protection of natural vegetation around rivers and lakes, which also is feed for herbivore freshwater fish species. A potential parallel NICFI financed watershed management project should however have its own design and would therefore not delay approval of the FfD project.

**Figure 5.2:** Proposed interrelation of different elements of Norwegian funded support to Colombia



Source: Vista Analyse

The programme should have a website to provide access to its work for other actors in Colombia.

## 5.6 Budget

### Assessment of the structure of the budget and its level of detail.

NORAD has explained how the budget is low compared to some other FfD projects, in order to focus on a few important outcomes. The FfD Colombia program was supposed to have a limited scope. It was decided in the original project design to start on a small scale and if successful expand. This strategy may have reduced attention on the most important issues that are relevant to FfD. We have suggested inclusion of one or more environmental outcomes. (See 5.1).

There are some arguments for holding budgets low when so many uncertainties exist. We suggest starting a bit slow and then ramping up when project design can be further developed. The budget structure should separate the inception phase from the general project execution.

The budget needs to be adjusted to eventual changes in outcomes and outputs. In 5.4 we propose some new possible outcomes/outputs/activities. Given the implementation of some of our suggested outcomes/outputs, the budget needs to be increased. Redesigning the project can be done during the inception phase. A rough estimate indicates that the new activities would require additional funding of at least 15 million NOK (approx. 50/50 between data management and pilots), plus national co-financing from the beneficiaries. The review team will not create a detailed budget or time schedule for new possible activities. A top-down rough estimate may be more confusing than useful. We suggest normal budgeting when a new project design is decided. Any new activities need to be planned bottom-up before any reasonable budgets can be made. New outputs and new partners will lead to more man-hours and more travel costs in total budget. The budget will have to be increased significantly. The inception phase may, on the other hand, not be very expensive.

NORAD's guidelines for budgets seem to have low levels of contingency, which might be a good policy given NORAD's activities. To secure comparable figures, budgeting of this project should be done technically in the same way as for other NORAD projects. The important part is to have detailed plans for the activities and include all costs expected to occur. This chapter has described some reasons why the figures are too low.

### Assessment of indirect operating costs/administrative costs in the budget.

Travel costs are included on the activities where they have been identified, as necessary. It is likely that we will experience a sort of ketchup effect on travels after the pandemic is over. Our view is that it is probably money well spent to travel when it is opened and reasonably safe. We will recommend travels to venues for different types of aquaculture and fisheries, both inlands and in the oceans.

### Assessment of sustainability and exit strategy.

A sustainable project demands good cooperation and communication between the involved participants. We believe focusing on Colombian perspectives, building up Norwegian and Colombian competence on the matters and involving local expertise will help on the long-term sustainability of the project. An exit strategy could include establishing south-south cooperation and the successful implementation of formal competence by the proposed university degrees.

## 6 Conclusions and recommendations

### 6.1 Conclusions

The review team finds that the project addresses important challenges and priorities in Colombian fisheries and aquaculture management. It has been planned for a long time, and several components could be started up. We would therefore recommend that it starts up with an inception phase. This should be used to make the necessary changes in project design and budget and should probably last until most implications of Covid19 on travel have ceased.

The political analysis reveals a lack of connection between the limited project and the ambitious goals. The proposed project is small in scope and would not be able to give the expected impact. The project would benefit from increasing its scope and activities along some of the lines suggested here. Certain new outcomes and new tasks should be included and will have cost implications. There is also a need for mutual learning, travel, and project management, that will affect costs. This leads us to conclude that the budget should be increased, but gradually, as new activities are introduced, and the project group gains experience. FfD should also consider supplementary beyond this project to reach the objectives of the programme.

Increased focus on achieving FfD objectives of poverty reduction is important for achieving FfD objectives. This is also key for the programme to contribute to the peace accord's goal of reducing root causes of the internal conflict. It would require supplementary activities that may benefit marginalized groups in rural areas. This includes activities directed at getting better information on social, economic, and cultural aspects of especially small-scale fishers and aquaculture producers for developing knowledge-based national policies. For efforts to improve the management of the sectors, it is of special importance to understand how they react to current regulations and the extent to which and how they self-organize their activities. Experience with co-management from Colombia and other relevant countries should be synthesized and applied in the project.

It seems that focusing on inland aquaculture, possibly also inland fisheries, would ensure the best scope for reaching the rural poor. However, we will warn that Norwegian competence on freshwater aquaculture in general, and in tropical waters in special, is limited. Thus, the project's success depends on dialogue and inclusion of a broader competence than the Norwegian. Thus, we recommend south-south cooperation with neighbouring and other relevant countries.

The project would also need supplementary activities for contributing to environmental sustainability of aquaculture and fisheries. This includes knowledge about those to be managed, the effectiveness of relevant management regimes and the inclusion of environmental agencies on both sides (The Norwegian Environment Agency in Norway and the Colombian Ministry of Environment and Sustainable Development). Their inclusion may help the project in giving better advice on the management of environmental risks, including in the context of Colombian initiatives of creating more efficient licensing procedures.

Colombia contains forests and aquatic environments with an extraordinary biodiversity with significance to the whole world. The review team has added introduction of invasive species as a serious risk with the potential for irreversible negative effects.

The project document reveals little information about environmental impacts of aquaculture. For a project aiming to support a growing industry with better regulation, it should be paramount to build these activities on a better scientific understanding of the ecology of the freshwater basins and better data. This should also include impacts on inland fisheries. Environmental assessments, impact assessments and monitoring requirements therefore should be key issues. These are also relevant for the management of the oceans. Some capacity building in how to assess sustainable fish stocks has been included in output 2.1.

The project results framework structure is good, but must be finalized, and include all relevant baselines and targets. The risk matrix is not clearly related to the design as stated in the results framework. The matrix should focus only on a limited number of the main risks for project management, which should be continuously monitored. Project safeguards must assure to do no harm and thereby comply with the cross-cutting issues in Norwegian development policy.

To secure that the project can carry fruits after the project period ends, we recommend developing a pilot. The current situation in Colombia indicates that technology transfer and relevant capacity building is likely to be more effective if knowledge could be tested in a real project. The pilot will contribute to collaboration between regional and central authorities.

The suggested activities under output 4 on improved health management of farmed aquatic animals seems well justified based on the information in the PD and associated documents and should start up as suggested.

## 6.2 Recommendations

Recommendations are listed chronologically as they appear in the report (numbers refer to sections in the report).

1. The project should include FAO's guidelines for small-scale fisheries and recommendations for small-scale aquaculture producers. (3.4)
2. The project should carry out an analysis of the sources and reasons for overfishing as well as destructive fishing practices. (3.4)
3. The project should analyse competition over use of ocean space, including gear conflicts. (3.4)
4. The project should ensure participation from fishers, aquaculture producers and communities, aiming to include their knowledge and develop practices of co-management. (3.4)
5. Strategic/regional environmental assessments, environmental impact assessments, monitoring and baseline data should be included, both for inland water bodies and oceans. (3.5)
6. Risk analysis should focus on the external risks for project implementation (4.1)
7. Safeguards should cover the four crosscutting issues of Norwegian development cooperation (4.2)
8. Universities' participation in the project should be ensured (5.1)



9. The project should find mechanisms for assembling and sharing data from many stakeholders (5.1)
10. FfD in Colombia should incorporate supplementary expertise from countries with more similar technology levels in freshwater aquaculture to give relevant advice on outcome 3. (5.2)
11. The project should develop a knowledge base that includes knowledge on the socioeconomic situation and fishing/aquaculture practices of the regulatees. There is also a need to incorporate national and international experiences with management practices relevant for Colombia (5.3)
12. The result framework should be finalized according to the proposed recommendations (5.3 and Annex)
13. The Norwegian Environment Agency and the Colombian Ministry of Environment should be involved in the activities to provide sufficient environmental competence (5.3)
14. The competence of the programme should be supplemented by environmental and social science competence on fisheries and aquaculture management in an international context. (5.3)
15. The competence in the project should include experience from foreign cooperation in i.a. Africa also when designing programs for inland aquaculture in Colombia, combined with evaluating Colombian experiences (5.3)
16. The project should include environmental outcomes. (5.3)
17. With Colombia as one of the three partner states in FfD, the Nansen-programme should pay another visit to Colombia
18. The project should start up with an inception phase followed by an adjusted execution phase (5.4)
19. The project should incorporate of a local pilot projects to try out in practice the theoretical learning achieved and also as a way to measure local impact of any changes AUNAP or ICA would like to make. (5.4)
20. Project administration should be included in the project description and in the budget. (5.4)
21. The project must ensure mutual competence building on both sides. There is a need to secure continuity in involved personnel on both sides. (5.5)
22. NORAD's initiative for a network of actors working with fisheries and aquaculture in Colombia should be maintained throughout the lifetime of FfD's engagement in the country. There should also be a mechanism for exchange of experience across Norwegian programs (5.5)
23. The budget is insufficient, needs to be reassessed after new project design and should be increased for execution phase(5.6)

# Appendices

## A Terms of reference

Terms of reference for quality assurance of the Fish for Development Programme Document for institutional cooperation between Colombia and Norway

### 1. Background

The Fish for Development (FfD) programme was established in 2016 to support partner countries in their efforts to ensure sustainable fisheries and aquaculture and to increase the sustainable production of fish and seafood. FfD's identified main partner countries are Colombia, Myanmar and Ghana. The main purpose with the programme is to develop institutional cooperation with partner countries within the fisheries and aquaculture sectors.

Colombia formally requested cooperation with the FfD programme in a letter to the Norwegian Ministry of Foreign Affairs (MFA) in 2016. The request was followed up by two fact-finding missions by technical teams from Norway (2017 and 2019), a concept note from National Authority for Aquaculture and Fisheries (AUNAP) (2017), and a Memorandum of Understanding (MoU) signed between the Kingdom of Norway and the Republic of Colombia in April 2018.

A project document (PD) has now been developed (mostly through digital dialogue). The PD describes a project (hereafter called 'the FfD project' in this document) designed to address selected challenges within the management of fisheries and aquaculture in Colombia. The selection is based on Colombian requests combined with an assessment of where Norway has relevant expertise and experience.

The Norwegian institutions involved in the project are the Institute of Marine Research (IMR), the Directorate of Fisheries (DoF), the Norwegian Veterinary Institute (NVI) and the Norwegian Food Safety Authority. On the Colombian side the involved institutions are AUNAP and the Colombian Agricultural Institute (ICA). The main target group of the project are AUNAP as the main management institution for the fisheries sector, and ICA as the main institution with responsibility for aquatic animal health in the fish farming sector. The project is designed to prioritize activities that will enhance AUNAP's and ICA's capacity for sustainable management of fisheries resources and aquaculture production.

This is a 5-year project with planned impact being "Improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors". Hence, the project targets socio-economic development through sustainable management of Colombia's fisheries resources and aquaculture production. Without sustainable management, the potential economic gains from fishing and aquaculture are likely to be short-lived as fish stocks are overfished and development of the aquaculture industry is hampered by negative developments in both fish health and the environmental status of the ecosystems used for fish farming in Colombia. There is a lack of data from fisheries and aquaculture sector. The existing data for the latest decades indicates a strong decline in quanta of fish harvested and a strong increase in aquaculture volumes.

The institutional cooperation program has limited resources and cannot aim to tackle all challenges in the management of fisheries and aquaculture sector. Based on the limitation of what Norwegian fishery and aquaculture institutions can contribute to, and the preparation work by technical teams and the partners involved, the following goals have been developed.

In addition to the institutional cooperation, Norwegian Agency for Development Cooperation (NORAD) supports separate projects with relevance to fishery and aquaculture, and information about these projects will be available.

The goals of the institutional cooperation programme between Norway and Colombia are defined as the following:

Impact: Improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors

Outcome 1: Relevant governmental management institutions and academia have increased capacity and knowledge in subjects regarding sustainable fisheries management, aquaculture and aquatic animal health

- Output 1.1: Increased number of staff in governmental management and educational institutions with international postgraduate education and short courses in subjects relevant for fisheries management, aquaculture and aquatic animal health.
- Output 1.2: Increased participation from academia in government decision-making processes regarding fisheries and aquaculture.
- Output 1.3 Increased and strengthened postgraduate offers in fisheries and aquaculture at Colombian universities

Outcome 2: Improved knowledge base for sustainable management of fisheries

- Output 2.1: Increased knowledge about the state of fisheries resources (including previously nonexploited resources).
- Output 2.2: Increased knowledge about fishing gear to improve selectivity and reduce ecosystem impacts.
- Output 2.3: The EAF Implementation monitoring tool is introduced and used for selected marine fisheries in Colombia
- Output 2.4: Increased capacity to interact with international and regional fisheries management bodies.

### Outcome 3: Improved capacity for sustainable development of aquaculture

- Output 3.1: Aquaculture regulations improved.
- Output 3.2: Knowledge base for the development of marine aquaculture established
- Output 3.3: Knowledge about the prerequisites for an improved licensing process in aquaculture established.
- Output 3.4: Improved knowledge of water resource management in aquaculture, with special regard to the effects of all users on general water quality in the waterbodies.

### Outcome 4: Improved health management of farmed aquatic animals in Colombia

- Output 4.1: Improved competence and capacity of ICA laboratory in the diagnosis of diseases.
- Output 4.2: Increased technical knowledge of ICA professionals in matters related to health, epidemiology, and diagnosis.

## 2. Purpose

Both the Norwegian partners to the project and NORAD have been unable to travel to Colombia due to Covid-19 and therefore a better understanding of context is necessary before reviewing the project. This appraisal is a two-fold assignment, both a targeted Political Economy Analysis on central topics for sustainable management of the fisheries and aquaculture sector, and a quality assurance of the PD for Institutional Co-operation between Colombia and Norway.

The purpose of the limited Political Economy Analysis is to strategically inform Norwegian aid providers on key issues surrounding the political economy of fisheries and aquaculture in Colombia and identify key factors that inhibit policy reform in the sector as well as the factors that influence goal achievement. The analysis shall identify risks associated with the proposed cooperation areas and the prospect of achieving results.

The appraisal of the PD will assess the FfD project document's relevance, realism, coherence, potential feasibility and potential risks, safeguards and expected sustainability of the development project. The appraisal of the PD should consider findings in the political economic analysis and provide recommendations.

## 3. Scope of work/priority issues

The assignment is limited in scope and shall include an assessment of the following points:

1. Political economy analysis relevant to fishery and aquaculture sector in Colombia
  - The political system and economic situation – its influence on the fishing and aquaculture sector
  - o Updated information<sup>1</sup> about development in relevant figures and economic indicators for this project. Inclusive different types of aquaculture production and different type of fisheries harvested (for

example: small scale, industry, inland, ocean, import, export, fleet categories/-size/numbers, aquaculture categories/-size/numbers).

- o Assessment of the project's relevance to the political and governmental priorities in Colombia. Political will and incentive for responsible fisheries and aquaculture management in Colombia. Assessment of the project's relevance to the main challenges in the fishery and aquaculture sector in Colombia. Why is the investment in capacity building in this sector so low? Are there other sectors who are prioritized/more profitable?

- o Possible conflict of interest between small-scale and industry level in both the fisheries and aquaculture sector should be assessed regarding contribution to poverty reduction/socio-economic development. Identify who has limited or no influence in decision making

In addition, bottlenecks in governmental administration and control of the sector, hereby

- registration of licences and registrations of aquaculture and fishery actors should be assessed.

- the system for environmental control of inland aquaculture implemented by various Regional Autonomous Corporations (CARs).

- o Cooperation areas – opportunities and barriers for achieving FfD programme operational goals

- o Focus on the proposed cooperation areas in draft PD and highlight opportunities and barriers. Provide strategic inputs on how to best secure effective implementation and achieve operational goals.

#### Risk analysis

- The Consultant should, based on the PD as a minimum, identify the most important issues outside the project management's control that could negatively affect the project's performance. These could include political-institutional risks (including corruption), economic-financial risks, social risks and environmental risks.

#### Safeguards

- The Consultant should assess and recommend the safeguards needed to comply with the principle of "do no harm" and to avoid that the project would contribute to adverse unintended consequences, especially in the four crosscutting issues in Norwegian development policy: human rights, anti-corruption, climate and environment and women's rights and gender equality.

- 

- The consultant should also assess if the PD is considering measures to avoid inadvertently contributing to elite enrichment without poverty reduction, and the undermining of government responsibilities.

2. Assessment of the project's coherence and relevance to the FfD-programme (Included in report if draft is written by NORAD, otherwise excluded)

- Coherence with Norwegian development aid and country programme in Colombia
- The project design's relevance to the priorities of the FfD programme
- Potential synergies and donor coordination in the fisheries and aqua-culture sector

3. Assessment of the capacity and competence of the partners

- Assessment of the quality of the competence of the expected project partners
- Assessment of the relevant competence to the goal achievement in the project and the Colombian needs, for example to what degree are Norwegian competence relevant for inland aquaculture in Colombia.

4. Assessment of the results framework

- Assessment of the description of the current situation/baseline,
- Assessment of the main activities and main objectives (impact, outcomes, outputs) and target group, e.g. consistency and realism,
- Assessment of the causal links between the problem description and chosen objectives and activities (theory of change).
- Assessment of the quality and sufficiency of the indicators, baseline and target values, data sources and plans for evaluations.
- The quality, simplicity and user friendliness of the planned monitoring system for the project
- Other comments on the results framework.

5. Assessment of the project management structure, efficiency and quality

- Assessment of the project management structure
- Assessment of the chosen means of carrying out the project. Are there alternative activities, outputs and outcomes which are more effective for reaching the impact? Should the resources within the project have been distributed differently to increase goal achievement? Are the ambitions realistic when considering the total budget?
- Assessment of whether technical challenges have been sufficiently considered for the implementation of the programme, especially due to the Covid-19 pandemic.

- The quality of the underlying analysis and planning process of the project, including participation of relevant stakeholders in the process (including women and ethnic minorities).
- Analysis of ambition level in relation to the resources allocated to the project and project duration.
- The relevance of the project concerning challenges that the project is supposed to solve and the interests of the involved stakeholders.
- The use of lessons learnt from earlier experience with similar projects and/or the best available knowledge and evidence, for example experiences with inland aquaculture.

#### 6. Assessment of budget and sustainability of the project

- Assessment of the structure of the budget and its level of detail.
- Assessment of indirect operating costs/administrative costs in the budget.
- Assessment of sustainability<sup>2</sup> ref. 3.1 and exit strategy.
- The assessment of risk is already defined in 3.1, but has relevance for 3.6.

#### 4. Implementation of the appraisal

Due to Covid-19 restrictions this assignment is a desk appraisal, undertaken without field visits or direct visits to partner institutions. The assignment shall be conducted based on studies of available documentation and where possible through interviews with representatives of relevant stakeholders in Colombia and Norway. NORAD will provide a list of relevant institutions and contact persons in Norway and Colombia, however, developing the full list will be the responsibility of the consultant. NORAD will provide relevant project background information.

An inception meeting with NORAD shall be held as soon as possible. Continuous dialogue with NORAD throughout the assignment is required. The appraisal will be carried out within the end of May 2019.

If the report contains sensitive information, the sensitive information should be included in a separate report. This can be discussed further with NORAD.

#### 5. Reporting

The report will not exceed 30 pages excluding annexes and will include a summary (2-3 pages) with main conclusions and recommendations. To the extent possible, the recommendations will directly relate to the Project Document as it stands.

A complete draft report shall be submitted in English and in electronic form to NORAD by 19 May 2021: olav.rostad@norad.no; nina.kristin.snyder@norad.no and cc post-SKP@norad.no. The Embassy and NORAD will submit possible comments within one week after receiving the draft. The final report shall be submitted no later than 31 May 2021.

6. Competence of the team of consultants

7.

The Consultant should ensure that the team has the following background and competence:

- Solid understanding of Colombia
- Experience with conducting similar political economy analysis
- Experience and knowledge of the fisheries and aquaculture sectors
- Experience from conducting appraisals of Norwegian development aid projects

7. List of Documents

-Project Document for The institutional Cooperation under the Fish for Development Programme in Colombia (2021-2025) 2021

-Assessment of opportunities for private sector development cooperation in Colombia, KPMG 2018

-AUNAPs Concept note 2017

-IMRs fact finding report 2018



## B References

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World Bank's index for political stability and absence of violence <https://info.worldbank.org/governance/wgi/Home/Reports>

Saavedra-Diaz, Pomeroy & Rosenberg 2016: Managing small-scale fisheries in Colombia. *Maritime Studies* (2016) 15(6)

Sander, G. Santos, J. & Pretorius, K. 2020: Training the front-line officers for better combat of fisheries crime. A mid-term review of the FishFORCE project at Nelson Mandela University, South Africa. Report from Norwegian College of Fisheries Science to NORAD, June 2020.

## C List of interviews

The review team has interviewed:

- Patrick Debels, Regional Coordinator CLME+ Project UNDP/GEF
- Saulo Usma, Freshwater Specialist, WWF Colombia
- Kirsti Andersen, Economy, Commerce and Culture Advisor, Royal Norwegian Embassy, Bogota.
- Dr. Daniel Arboleda, Ministry of Agriculture and rural development
- Maria Aguilera, Ministry of Agriculture and rural development
- Alvaro Ortega, Ministry of Agriculture and rural development
- Yeili Danielly Rangel Penaranda, Ministry of Commerce, Industry and tourism
- Fernando Henao – Director of Sustainable Development, Department of Planning
- Angie Paola Zamudio Villarreal, Department of Planning
- Maria Olga Peña Mariño, Department of Planning
- Javier Plata, Main contact for the project in AUNAP
- Olav Rostad, NORAD
- Nina Kristin Snyder, NORAD

# D Production volumes and trade for Colombian aquaculture and fisheries

The presentation of statistics here illustrates some of the problems with finding relevant information, ref. section 3.2. The underlying detailed overviews and calculations are presented in Excel sheets that can be sent to NORAD to be available for the project.

## Aquaculture production

The National Authority for Aquaculture and Fisheries (AUNAP) presents data on the fisheries through the Colombian Fisheries Service for Statistics (SEPEC). The information on the web site was difficult to access. For 2016-2019 it is divided by municipalities (several hundred), while for 1997-2015, it can be accessed by specie and years. Table A.4.1 shows consolidated data for the years 2016-2018:

Species / Landings (Tons/yr)	2016	2017	2018
Bacachico ( <i>Prochilodus magdalenae</i> )	38	56	596
<b>Cachama blanca / white (<i>Piaractus brachypomus</i>)</b>	<b>1.836</b>	<b>312</b>	<b>2.605</b>
Cachama negra / black ( <i>Colossoma macropomum</i> )	187	-	<b>74</b>
Cachama híbrida / hybrid (blanca con negra)	20	-	<b>38</b>
<b>Tilapia plateada / Nile (<i>Oreochromis niloticus</i>)</b>	<b>11.312</b>	<b>13.420</b>	<b>6.399</b>
Tilapia roja / red ( <i>Oreochromis</i> spp.)	9.526	7.794	18.266
<b>Trucha arcoiris - Rainbow Trout (<i>Oncorhynchus mykiss</i>)</b>	<b>2.057</b>	<b>1.724</b>	<b>1.371</b>
Carpa / Carp ( <i>Cyprinus carpio</i> )	122	118	1
Otros peces cultivados / Other farmed fishes	98	99	110
<b>ACUIC. PECES / FISH FARMING</b>	<b>25.195</b>	<b>23.524</b>	<b>29.459</b>
<b>Camarón blanco / shrimp (*1. <i>Litopenaeus vannamei</i>)</b>	<b>4.497</b>	<b>4.479</b>	<b>114</b>

Table D.1: Main species produced by aquaculture in Colombia 2016-2018, according to SEPEC

Between 2016 and 2018, which is the most recent year in SEPEC, three types of freshwater fish represented 98-99% of the total production:

1. Two Tilapia species (*O. niloticus* and *O. spp.*) that together represented between 83 to 90% of the total fish farmed (23 195 to 29 459 tons/year).
2. Rainbow trout (*O. mykiss*) landing represented 5 to 8% of the total (1.372 to 2.057 tons/year).
3. Three species of “Cachama” (called white, black and hybrid “Cachama”) represented 1 to 9% of the total (312 to 2 717 tons/year).

Small production of the carp (*C. carpio*), “Bocachico” (*P. magdalenae*) and other species (named as Pirarucú, Sábalo, Chilocio, Dorada, Sabaleta, Chango y Bagre) have registered volume from a few to some tens of tones per year, altogether just 1 – 2 % of the total production.

Shrimp (*L. vannamei*) production was at an annual average of 8.847 tons per year between 1999 and 2018, reaching a maximum of 34.826 tons in 2008. Since then, it has been an unstable decrease over time, reaching a minimum record of only 114 tons in 2018.

FAO is another source of information, presenting data reported by Colombian authorities (FAO 2021). Here, species names are presented in English, which makes comparisons with Spanish names in SEPEC challenging. The FAO data do not coincide with those found in SEPEC. According to it, six species accounted for 94 – 97% of the FW aquaculture production (tons range for 2017-2019): (1) Tilapias Nei (50.450-70.906 Tons), (2) Pirapatinga (White “Cachama”, *Piaractus brachypomus*; 21.150-30.797 tons), (3) Nile tilapia (19.400-25.051 tons), (4) Rainbow trout (17.450-26.471 tons), (5) Netted prochilod (Bocachico, *Prochilodus reticulatus*; 0-2.550 tons); (6) Cachama (0-1.800 tons). Longer-term production volumes based on these data are found in Figure D.1.

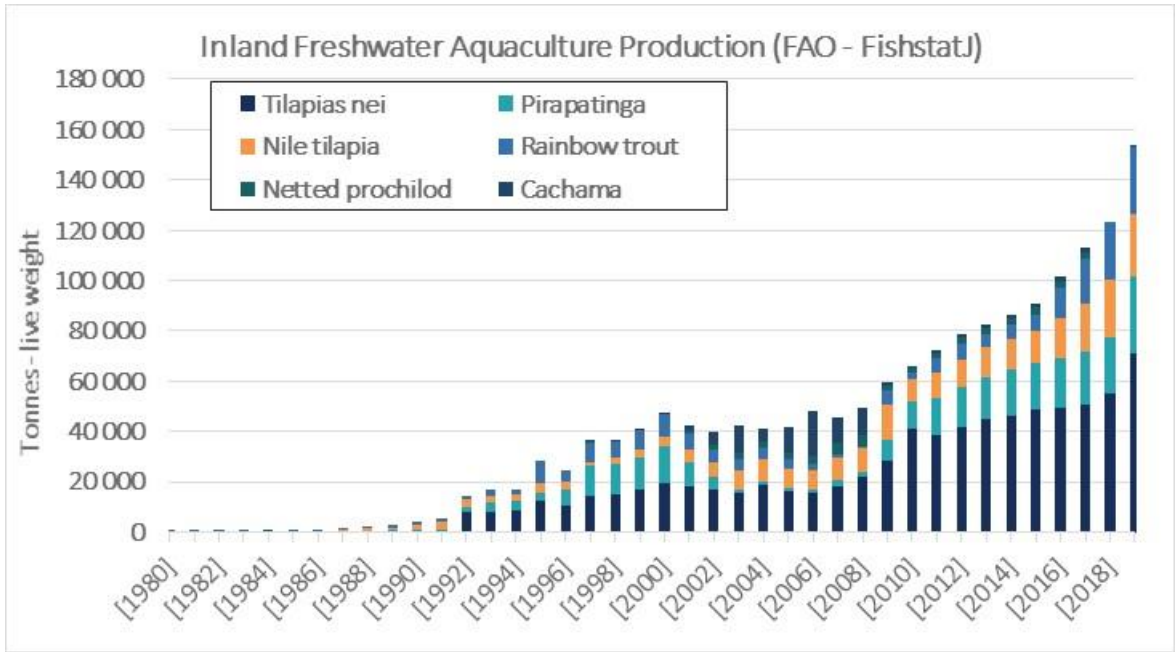


Figure D.1. Production volumes of different species in Colombian aquaculture, based on FAO (2021)

The regional distribution of aquaculture is presented in Figure D.2.

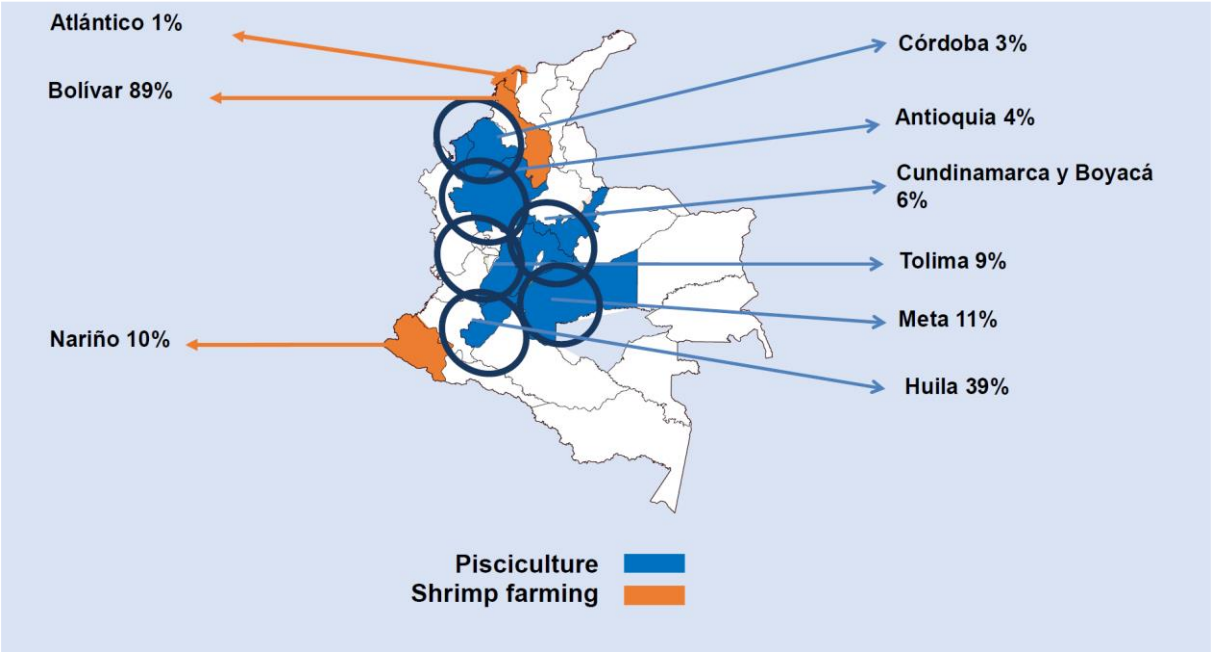


Figure D.2: Distribution of aquaculture in Colombia (MADR 2021).

Catches in fisheries

For fisheries, we present data on catches from FAO. As for aquaculture, data are provided for individual species. In Figure A.4.3, we have grouped the data into freshwater and saltwater fisheries. We see that volumes from marine catches increased significantly in the 1990s before a decline. Inland fisheries have been more stable, although also declining. The major marine species caught are tuna (Yellowtail, Skip-jack and Bigeye tunas – 38 300 tons in 2018). The major catches in inland fisheries are Prochilodus mariae (called boca chico, 15 870 tonnes), followed by siluroids fish (222 tonnes), Nile Tilapia (155 tonnes) and Trahira fish (115 tonnes).

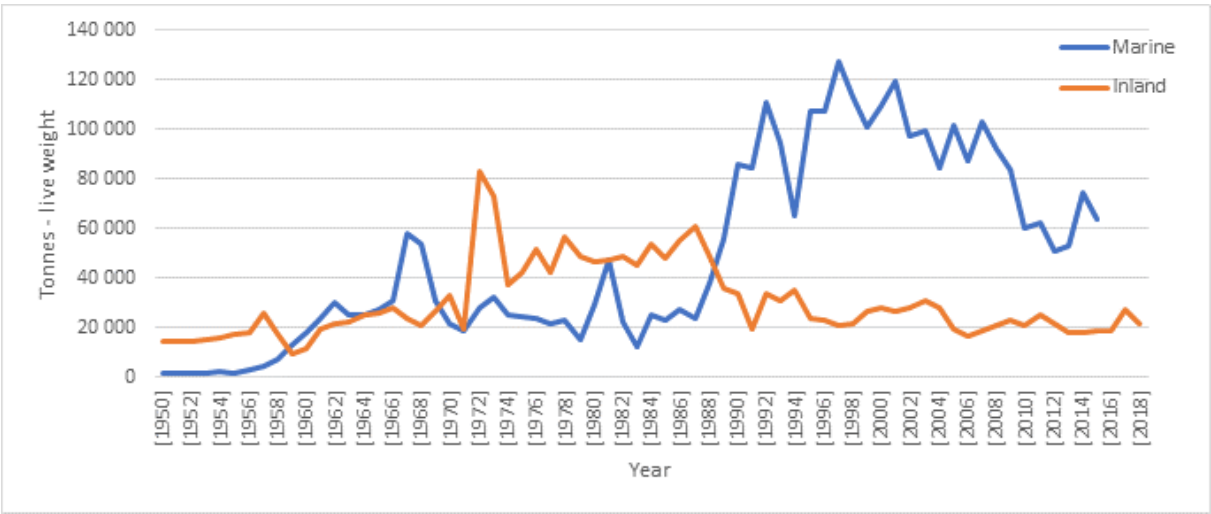


Figure D.3. Annual catches in Colombian inland and marine fisheries, based on FAO (2021).

Catch volumes in SEPEC are generally higher than in FAO. For instance, SEPEC do report 36 000 tons caught in freshwater in 2018, whereas FAO reports 22 000.

Another significant inconsistency in numbers can be found if FAO numbers are compared with the PD. Here, it was quoted that AUNAP estimated the national fisheries production in 2018 to be 194 000 tons (PD:8). The FAO numbers that we have used in section 3 of the report, is 62 000 tons. We have not tried to find out whether this simply is a misunderstanding or if it represents systematic differences in different statistics.

**Colombian trade in fish and shellfish**

AUNAP has contributed with data on trade in 2019, included below. Updated numbers are published every three months and can be accessed at <https://www.treid.co/post/importaciones-y-exportaciones-de-pescado-en-colombia>

The value of fish-shellfish products imported in 2019 accounted for closely USD 229.3 million, including cost, insurance and freight (CIF). From that number, the five most important fish-shellfish products imported by Colombian companies were shrimp & prawns USD 36.0 million (CIF), salmons USD 24.8 million (CIF), frozen fish USD 24.3 million (CIF), salmon filets USD 16.6 million (CIF) y and frozen filets USD 16.0 million (CIF) (Fig D.4).

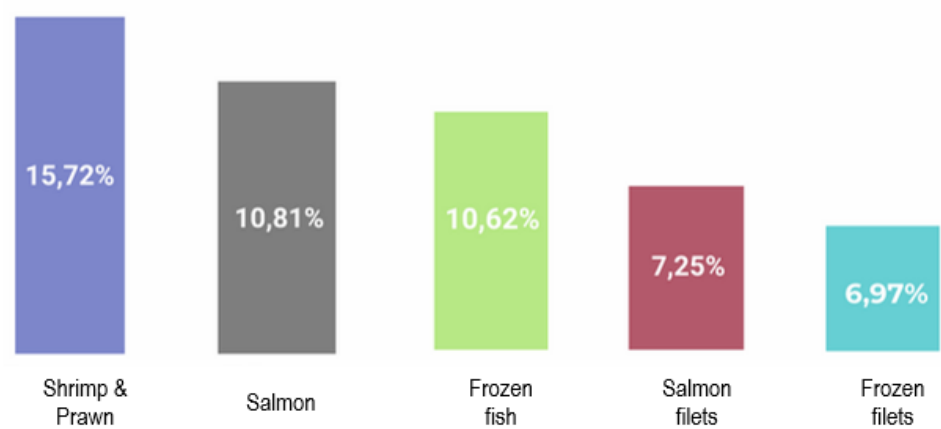


Figure D.4. The five (5) top fish-shellfish products imported by Colombia in 2019

The fish-shellfish imported by Colombia in 2019 came from 42 different countries. The top five were Chile with an import of USD 55.6 million (CIF), Vietnam USD 46.5 million (CIF), Ecuador USD 41.4 million (CIF), China USD 21.7 million (CIF) y Argentina USD 14.1 million (CIF) (Fig D.5).

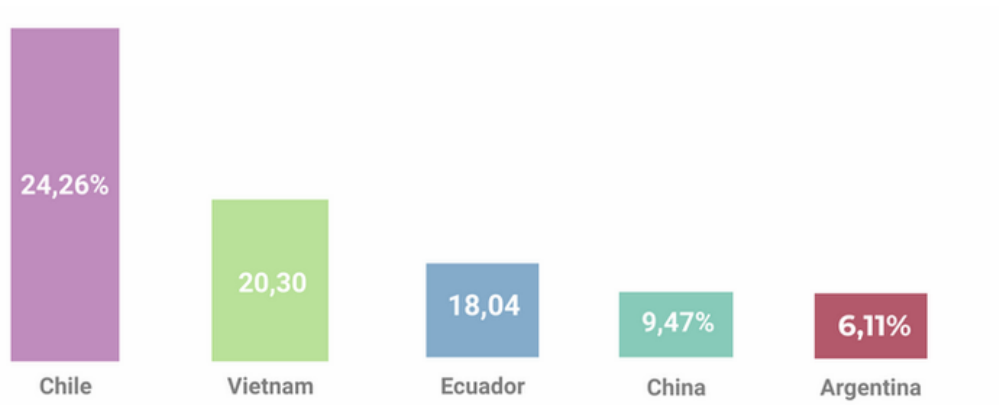


Fig D.5. The top five countries from which fish-shellfish products were imported by Colombia in 2019

The value of fish-shellfish products exported in 2019 accounted for closely USD 90.0 million Free on Board (FOB). From that number, the five most important fish-shellfish products exported by Colombian companies were Tilapia filets USD 40.1 million (FOB), Yellow Fin Tuna USD 8.1 million (FOB), Frozen Tuna USD 7.4 million (FOB), White tuna USD 6.7 million (FOB), and Skipjack Tuna USD 6.3 million (FOB) (Fig D.6).

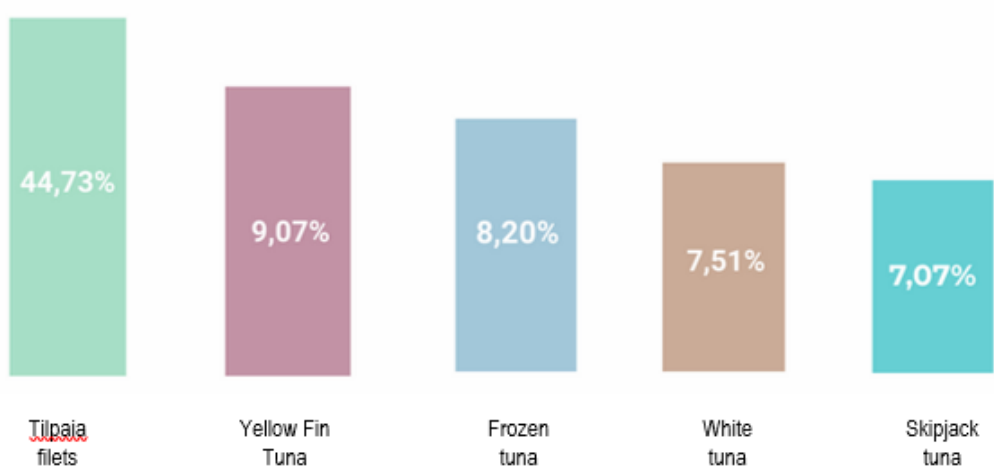


Fig. D.6. The top five fish-shellfish products exported by Colombia in 2019

The fish-shellfish exported by Colombia in 2019 went to 17 different countries. The top five were USA with an export worth USD 51.3 million (FOB), Ecuador USD 10.3 million (FOB), Guatemala USD 6.1 million (FOB), UK USD 2.5 million (FOB) and Peru USD 2.4 million (FOB) (Fig D.7).

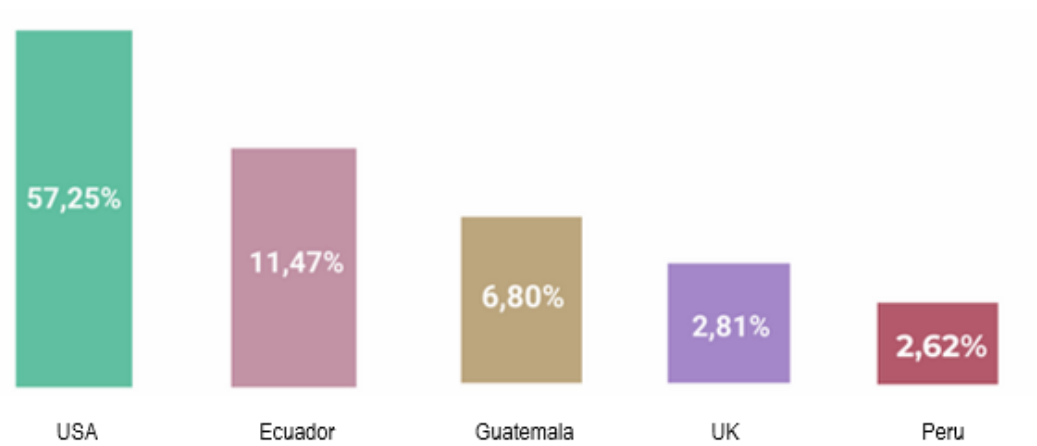


Fig D.7 The top five countries to which Colombia exported fish-shellfish in 2019



# E Results framework with specific comments

The annex is provided as a separate Excel file to NORAD

# F Risk analysis review (Risk matrix and safeguards)

## F.1.1 Summary of risk assessment

Overall, the major external risks that can negatively impact Project implementation and achievement of desired results are that proposals for improved regulation, management measures and guidelines are not adopted and implemented by the Colombian government, and that there is insufficient government funding such that the fisheries and aquaculture management institutions in Colombia are not able to deliver on their mandate. The main internal risk factors are that relevant Norwegian or Colombian staff does not have sufficient time to put effort into the project such that planned activities are delayed. Another important internal risk factor is that the activities are not planned sufficiently well such that they become less efficient in reaching the goals of the project, e.g., if training is not sufficiently targeted to the participants.

**Risk matrix**

3 Serious consequence	Medium	High	High
2 Some consequence	Low	Medium	High
1 Minor consequence	Low	Low	Medium
	1 Low probability	2 Medium probability	3 High probability

## F.1.2 IMPACT: Improved sustainable socio-economic development for the Colombian fisheries and aquaculture sectors

The identified external and internal risks and consequences related to the achievement of project impact is presented in the table below. These are general risk factors that also apply to most of the outcomes in the project. Risk factors related specifically to each outcome are also presented unless they have already been presented under the risk factors for Impact.

EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Inadequate public funding allocated to AUNAP/ICA for necessary personnel input into the Project.	All aspects of project implementation hampered and identified challenges in fisheries and aquaculture not addressed, or threat to sustainability of project results.	2	3		<ul style="list-style-type: none"> <li>- The bilateral agreement between the Colombian and Norwegian governments should specify the Colombian counterpart staff, level, duration and budget cost.</li> <li>-Project activities to be integrated in workplans of AUNAP and ICA</li> <li>-Awareness raising of the project at management level in AUNAP and ICA</li> <li>-Establish the Joint Coordination Committee (CCC) with by-laws. The CCC will help the implementation of the project by ensuring the endorsement of the project workplans at the top level of the involved institutions, necessary integration of the project workplans into the institutional workplans and efficient coordination among the involved Colombian institutions</li> </ul>
Lack of reliable data on fish stock, species, exploitation, etc.	Planning activities will not be based on correct information, and therefore have low relevance and impact	3	2	RED	Project to support improvement of database and data quality
Lack of political support for implementing more sustainable management measures	No move towards sustainability, with potential consequence being further depletion of fisheries resources, and leading to environmental and fish health problems in aquaculture.	1	3		<ul style="list-style-type: none"> <li>-Increase public awareness by making data, analysis and recommendations public.</li> <li>- CCC to discuss progress at least yearly, and take action if insufficient progress.</li> <li>-Awareness of Project at highest level of the Colombian institutions involved</li> <li>-Invite civil society organizations to stakeholder meetings or present in parts of the Annual meeting of the project. Relevant</li> </ul>

EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
					<p>NGOs are: MARVIVA, CI, FFCC, WWF</p> <p>-Mid-term review, and reformulation if needed</p> <p>- Project outputs and outcomes are in line with stated Colombian policy goals.</p>
Corruption/political interference related to enforcement of laws and regulations or granting of licenses	As above, and imbalance in economic benefits from the sector, especially negative for the poorest stakeholders	2	2		<p>-As above</p> <p>-Colombian project group take part in national meetings about corruption</p> <p>-Learn from the UNODC project in Colombia</p> <p>-meetings also with the CARs to increase awareness of corruption risks in licensing (Association of CARs)</p> <p>-Increased focus on local activities and beneficiaries</p>
Low compliance with fisheries/aquaculture laws and regulations on the part of private sector operators	As above	1	2		<p>-Stakeholder meetings/include private sector operators (also representatives for small scale producers) included in the preparations for new regulations/laws (this is mandatory in Colombia)</p> <p>-Improved communication/ information to small producers about new regulation</p> <p>-Enough trained govt local staff and budget to assure monitoring &amp; control</p>
Change in political power or large macro-economic shock	Political will or economic ability to support Project eroded	1	2		<p>- CCC to have sufficient power to act in case of external factors affecting the project</p>
Large and sudden disease outbreaks in aquaculture or in terrestrial animals.	High economic losses, market closure and impact on food safety. Impact on ecosystems and biodiversity. Focus of project participants/veterinarians from	2	3		<p>- Biosecurity measures would improve as result of the project.</p> <p>- Change workplans to be able to use sudden disease outbreaks as part of the research, training and competence building.</p>

EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
	Colombia diverted from project implementation.				<ul style="list-style-type: none"> <li>-Activate and update emergency response plans in ICA</li> <li>-Less focus on exotic spp and more focus on native spp with ecosystems-based methods</li> </ul>
Natural disasters, political unrest, security issues or pandemic limits travel and some project activities	Project implementation hampered, planned activities postponed	3	2	RED	<ul style="list-style-type: none"> <li>-Virtual meetings and online training where possible</li> <li>-Project scope and content designed to limit the risk that project activities are affected</li> <li>-Review information from relevant authorities that assess risks for natural disasters prior to planned activities to assess risk</li> <li>-Strengthening of community-based activities that could continue even in moments of national crisis</li> </ul>
Colombian institutions are modified by new governmental management schemes	Changed structure could require changes in project and result in delays	1	3		<ul style="list-style-type: none"> <li>-Colombian government to assure that responsibility for the project is clearly defined in case of institutional changes</li> <li>-Immediately act if project adaptation is needed</li> </ul>

INTERNAL RISK	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Key personnel in Colombia without enough time to devote to Project	Limited Project implementation with subsequent negative effects on the overall Project goal	1	3		<ul style="list-style-type: none"> <li>-Project goals are aligned with Colombian priorities</li> <li>- Workplans and Timing of work to be agreed early</li> <li>-Awareness of Project at highest level of the Colombian institutions involved</li> <li>- Training to assure efficiency of key staff (also in case of new staff being involved)</li> </ul>

INTERNAL RISK	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Key personnel in Norway not available to devote time to Project	Limited Project implementation with subsequent negative effects on the overall Project goal	2	2		<ul style="list-style-type: none"> <li>-Awareness of Project at highest level of the Norwegian institutions involved</li> <li>-Inter-institutional committee of Norwegian partners involved</li> <li>-Workplans and Timing of work to be agreed early.</li> </ul>
Staff trained by the Project not maintained or used in relevant tasks	Limited Project implementation and sustainability with subsequent negative effects on the overall Project goal	1	2		<ul style="list-style-type: none"> <li>-ICA and AUNAP to plan for the use of trained personnel</li> <li>-Employees with permanent contracts have to work for 4 years after a sponsored 2-year education abroad (already gov. rule)</li> <li>-Training of new key staff being involved</li> </ul>
Training is not relevant or not provided to relevant employees	As above	1	2		<ul style="list-style-type: none"> <li>-Clear communication prior to planning of training to increase relevance</li> <li>-Clear criteria for selection of participants for each type of training</li> <li>-Establish a committee across institutions in Colombia to select and prioritize candidates for master studies</li> <li>-The project training to be integrated in institutional staff development plans</li> <li>-Evaluation of training to be used when planning subsequent training</li> </ul>
Key personnel quit (external risk) or are reallocated to other tasks	Disruption in project management and implementation	2	2		<ul style="list-style-type: none"> <li>-Awareness of not reallocating</li> <li>-Periodical meetings in the Colombian institutions to share information/ and to ensure that acquired knowledge is spread within the institution and to ensure that the high level in the institutions are informed/involved</li> <li>-Training of new key staff being involved</li> </ul>
Ineffective project and financial management	Project implementation hampered, undue advantage	1	3		<ul style="list-style-type: none"> <li>-Assure highly experienced project manager and key staff</li> </ul>

INTERNAL RISK	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
					<ul style="list-style-type: none"> <li>-Clear and effective project management structure to be set up in the Institutional cooperation contract</li> <li>-Sufficient planning, coordination and communication about upcoming activities</li> <li>- Norwegian auditor general/accounting rules</li> <li>-Ask for and follow advice to improve management effectiveness</li> </ul>
Overlap with other donor projects	Inefficient use of resources	1	1		<ul style="list-style-type: none"> <li>-Colombian project group to keep all parties updated on all relevant projects</li> <li>-Regular meetings with other relevant projects</li> <li>-Coordination also with people involved in international cooperation in fisheries</li> </ul>
Low English level limit the benefits of participation in project activities	Limited increase in capacity and knowledge, communication problems may delay project implementation.	1	2		<ul style="list-style-type: none"> <li>-English training provided by project prior to master studies</li> <li>-Selection of candidates also based on English proficiency</li> <li>-Providing English-Spanish interpreters in working sessions/short courses</li> <li>-translation of documents and reports where necessary</li> </ul>
Weak coordination and communication among collaborating partners both between and within countries	Project activities are not sufficiently planned and therefore either not conducted or conducted without reaching their full potential	1	2		<ul style="list-style-type: none"> <li>-Clear and effective project management structure to be set up in the Institutional cooperation contract</li> <li>-Sufficient time for planning and preparation of capacity building activities in budget</li> <li>-Involve decision-makers and colleagues in the project</li> <li>-Project to support inter-institutional collaboration in the sector (including other projects) and between countries in the region</li> </ul>

### F.1.3 Risks related to Outcome 1:

Relevant governmental management institutions and academia have increased capacity and knowledge in subjects regarding sustainable fisheries management, aquaculture and aquatic animal health



EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Applicants from Colombia are not accepted to universities in Norway or abroad	Limited increase in capacity and knowledge	1	2		-Select applicants from Colombia with an appropriate profile (curriculum vitae) to project goal -Advisory about application process, rules and deadlines -Define selection criteria according to the requirements of the Project and Norwegian universities -Work towards ensuring a sufficient number of applicants -Provide English training
Not sufficiently qualified students for project scholarships	-Limited increase in capacity and knowledge -Some students will not graduate with MSc title	1	2		-Applying appropriate selection criteria -Broad publicity for the MSc thesis opportunities in Colombia -Monitoring of student academic activities. -Master thesis topic to be aligned with project goals to provide assistance during thesis work -English training prior to start of studies
Lack of capacity, funding or interest in Colombian universities for strengthening post-graduate studies in fisheries and aquaculture	-Postgraduate studies not strengthened -National scientific capacity in the sector not improved	1	2	Green	-Strengthen capacity at high academic level in Colombian universities -Project funding and agreement of public funding after project ends

INTERNAL RISK	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Network with universities not established or not useful	Project implementation and Sustainability of project goals reduce	1	2		-Clearly define the objectives and scope of the network -Regular interaction with relevant stakeholders
After completing degree project, students do not get employment in relevant field of study or their new skills are not used.	Limited increase in capacity and knowledge	1	2		-Prioritizing nominees from the governmental involved institutions -Selecting graduate programs/short courses/new skills according to the project goals.

#### F.1.4 Risks related to Outcome 2:

Improved knowledge base for sustainable management of fisheries

EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Having applied to be a CNCP, Colombia is not accepted by a RFMO	Output goals are not achieved (2.4)	1	2		Change strategies or increase commitment for being <u>accepted</u> -Colombia lobbying through government diplomatic channels
Insufficient reliable data and research to improve database	Low quality baseline will reduce effectiveness of policies and strategies	2	3		-Strong emphasis on strengthening govt database -Emphasis on activities related to 2.1, 2.2, 2.3 -Regional cooperation with exchange of information -Incorporate data from non-governmental sources

INTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Implementation of mechanisms studied for reducing bycatch is not carried out.	Results are not applied and managed	1	3		Create awareness of the importance to implement reducing bycatch mechanisms

### F.1.5 Risks related to Outcome 3:

Improved capacity for sustainable development of aquaculture

Improved capacity for sustainable development of aquaculture					
EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
Lack of cooperation between relevant agencies (CARs, Ministry of Environment and Sustainable Development, AUNAP and ICA) for aquaculture licenses	The licensing process is not simplified/improved  -Adverse environmental impacts if Ministry of Environment and Sustainable Development comes into the process at a late stage	1	2		-Awareness of the importance of the project  -Political ownership and keeping decision-makers informed  -Make use of and strengthen already established cooperation forum between these agencies  -CCC to include Ministry of Environment and Sustainable Development
Suggested improvements to regulation are not adopted	Delay timeline in the project for 3.1, and weak results. Aquaculture regulation not improved, with consequence for impact and sustainability	1	3		-Assure political ownership and keeping decision-makers informed  -Previous discussion of suggested regulation among stakeholders  -Suggested regulations are compatible and easy to be enforced with current national legislation and strengthening of local capacity (budget, staff)

### F.1.6 Risks related to Outcome 4

EXTERNAL RISKS	CONSEQUENCE	PROBABILITY & IMPACT			MITIGATION ACTION
ICA does not allocate sufficient number of employees to aquatic animal health	Limited Project implementation with subsequent negative effects on the overall Project goal	2	2		<ul style="list-style-type: none"> <li>- ICA plans for the use of trained personnel for aquatic animal health according to ICA current needs.</li> <li>-Awareness of not reallocating personnel</li> <li>-Periodical meetings to share information</li> <li>-Getting the decision-makers and stakeholders involved in the program</li> <li>-CCC to include Ministry of Environment and Sustainable Development</li> </ul>
Insufficient Funding of laboratories	New diagnostic techniques not continued/sustainable	2	2		<ul style="list-style-type: none"> <li>-Create an aquatic animal diagnosis area in the National Veterinary Diagnostic Laboratory.</li> <li>-Better planning of the budget in advance to manage the necessary resources for the implementation of the new techniques and maintain the existing ones.</li> <li>-Co-financing with other public and private agencies (and projects)</li> </ul>

### F.1.7 Identified potential unintended consequences of the Project and safeguards

UNINTENDED CONSEQUENCE	Probability	SAFEGUARDS
<p>Gender equality and women's rights:</p> <p>The undermining of the role of women as stakeholders and decision-makers in the fisheries sector by not including women as invited stakeholders to stakeholder platforms including those settled in remote areas of the country</p>		<ul style="list-style-type: none"> <li>-Assure women's participation on project decision-making level (especially CCC) and advisory committee</li> <li>-Make effort to ensure that female stakeholders are also represented in stakeholder meetings</li> <li>-Inviting women from isolated geographical areas in the country and supporting their participation</li> </ul>

UNINTENDED CONSEQUENCE	Probabil- ity	SAFEGUARDS
		-Making preparatory meetings and getting involved diverse and widely representative stakeholders for each of the activities.
Gender equality and women's rights:  The undermining of gender equality in governmental agencies if female employees of the partner institutions and other relevant agencies are not included in Project activities		-Ensuring that relevant women are included in the Project activities  -Consider women views in the project design and implementation  -Keeping records of gender balance of Project activities
Human rights and discrimination: The risk that project activities could lead to human rights violations		Making preparatory meetings and getting involved diverse and widely representative stakeholders for each of the activities (including local fisher communities, indigenous peoples and afro-descendants).
Corruption: The risk that the Project itself could lead to increased corruption		-Project should through increased transparency reduce the possibility for corruption and political interests interfering with the implementation and enforcement of management measures that will contribute towards sustainable management of fisheries and aquaculture  -Clear rules for procurement with project funds (Norwegian funding regulations) and follow-up on audit observations  -Clear rules for recruitment and contracting (TOR, requirements) and monitoring of compliance
Greenhouse gas emissions: The risk that the Project itself could lead to increased emissions		- Establish good communication between partners such that activities can be planned and executed without excessive travel  - Improved food security based on fish rather than meat would decrease greenhouse gas emissions.  - More nature-based solutions for fish farming instead of constructing fish tanks
Environmental damage: The risk that the Project itself could lead to environmental problems		-Successful implementation of the Project aims to achieve the opposite  -Planning and advice prior to activities that may consider any possible environmental problems.  -Comply with national environmental regulations (including when EIA is required)

UNINTENDED CONSEQUENCE	Probabil- ity	SAFEGUARDS
		-CCC to include Ministry of Environment and Sus- tainable Development





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